WOMEN AND HEALTH CARE IN MUMBAI

A STUDY OF MORBIDITY, UTILIZATION AND EXPENDITURE ON HEALTH CARE IN THE HOUSEHOLDS OF THE METROPOLIS.

BY

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CHAPTER I

Introduction

The health of the general population as well as that of specific groups (infants, women etc) has for long been an important concern for development studies When economic development is put in the context of human development, the success of countries to secure good health for their people assumes great significance. Morbidity, or physical and mental illness, is increasingly being recognized as a 'measurable indicator of well being' (Shariff, 1995). Individuals in a society need to be regarded as critical agents in the development process rather than as beneficiaries. The role of women in this process assumes greater significance, as they constitute a substantial portion of the population. They play a multiplicity of roles both outside the household and within, which most often go unacknowledged Her ability to perform these roles and the quality of her life are determined by the health status she enjoys. It is a well established truth that women face a host of problems through out their life cycle. These problems are related not only to physiological change, but also to the work they perform their low status in the family and society, gender discrimination due to social, cultural and economic factors operating in and outside the home. Most of the problems which women face are interrelated and have their basis in the low social status of women.

One of the major problems women face in relation to health is with regard to access to basic and good quality health care services. This is due to a host of factors operating within and outside the households. This lack of access can be traced to the structures of patriarchy that function in all sectors and in most of the communities. This is manifested in the pattern of health care provision ranging from the government to the household level. Women have little access to health care because their health is given little priority in the household. The government health services and programs have never accorded importance to women's overall health problems. Right from the first five year plan women's health has not progressed beyond care during maternity. One of the first programs that was focussed specifically on women was the Family Planning program, which was mainly a population control program, targetted at women in the reproductive age,. The Family Planning program was rechristened Family Welfare (FW) program, with the inclusion of the Maternal & Child Health (MCH) in its objectives. However, the emphasis in the program remained the same; namely, carrying out sterlisations, inserting Intra Uterine Device (IUDs), distributing condoms, mainly focusing on demographic targets of birth rate, total fertility rate, couple protection rate among others. These programs were given a high priority as they were centrally funded with a substantial allocation of resources in terms of foci, money, emphasis and importance. These programs were essentially sterilization programs with incentives being provided and a large amount of time of the functionaries was spent on chasing 'targets'. The FW program failed miserably as the birth rate did not decline. The program was reviewed again, especially when the MCH component under the Child Survival and Safe Motherhood (CSSM) program was launched in the 1980s. The emphasis was on pre natal, natal, post natal care, immunizations, vaccinations etc.. In the mid nineties due to the criticism of the FW program and the international focus on reproductive health and reproductive rights, the government launched a new program from April 1996 called the Reproductive and Child Health (RCH) program This program retains the major components of the earlier CSSM program adding on management of STDs and RTIs to its list of objectives. In most of the programs for women in India the underlying reason has always been demographic. Even the latest RCH program

narrows its concern to women's reproductive role. Though there is a lot of rhetoric about the inter relatedness of women's health problems, this does not get reflected in programs for women in a comprehensive manner. There is no examination of women's health needs in the broader perspective of their social role and the productive work which they perform both within the house and outside, their mental health, illness due to old age, due to sexual abuse and violence, the impact of new technologies and development processes and environmental factors.

The problems have become more acute in the present economic context of the Structural Adjustment Program (SAP) being undertaken in the country. There is a further push for privatisation of the health sector, which is already, a dominant sector operating without any accountability or monitoring mechanisms. Further there is a cut down of funds for the health sector and intense targeting of health care services as against the provision of basic health care services to all. In the urban context, there are moves to cut down funds for health programs and to hand these over to the private sector. This is with the background that households are already spending more from their meager resources than what is being spent by the government on health care. The overall economic forces that are unleashed in the broader context determine to a large extent the various dynamics that operate within the household. In India where majority of the people live on a subsistence economy, the opportunities for women to access health care services become more diminished.

Women's health is accorded low priority not only in the private and public health sector but this bias is also manifested within the households. This is due to the fact that women are not considered important except for their role as mothers. Access for women to health care services are very much determined by, their status and role in the family, age, educational status, earning and occupation status among a host of other factors. At the household level gender bias in the allocation of resources usually begins at birth and continues right upto her death.

The dynamics operating within the household with emphasis on women's health issues especially with regard to the costs incurred by households have not been documented in great detail. A few small studies have highlighted the lack of concern for women's health care and the neglect of their gynecological and other reproductive health problems. As per our knowledge no study has systematically and comprehensively looked at the cost aspect of women's health in all its dimensions in India. In the recent past there have been studies documenting household level expenditures on health. These studies have focused on general studies on health care and health expenditures and paid little attention to the cost of women's health. These studies have looked at the cost of maternity and abortion within the overall health expenditure (these studies are discussed in more detail in the preceding chapters). There is very little information on the costs that the households incur on illness related to menstruation, gynecological, ante-natal care, still births, deliveries (various types e.g. cesarean, breach, complicated etc.) post natal care, menopause, related specifically to old age, infertility, abortion, sex determination tests, Sexually Transmitted Diseases (STDs) and other health problems related to work and environment. The deficiencies and gaps in the earlier studies were mainly because the focus was on overall health and not on women's health in particular. Further there has not been much focus on issues related to urban health more specifically those affecting women in urban areas especially from poor households. It has been assumed that urban areas due to the availability of health care services they are more

accessible to people. Due to this, issues with regard to women's health especially in urban areas did not come out in great detail.

This present study makes an attempt to fill in the gaps. The major objectives of the study was to document and analytically understand the perceived morbidity patterns, access and constraints of women to health care facilities and their utilization and in expenditures by households on women's health problems with special reference to socio economic differentials.

CHAPTER II

Study Design & Methodology

The conduct of the present study has been unique in many respects. In most of the household level studies conducted, the respondent usually was the head of the household who invariably would be a male. Due to this, issues with regard to women's health did not come out in great detail. As women constitute a major segment of society and suffer the most due to inaccessible health care and the male dominated culture prevailing in Indian society there was a need felt to examine and focus on specifically women's health. We have attempted to modify the household health survey to place a special emphasis on women's health problems. Some significant modifications were made in the methodology. Firstly the interview schedule was administered by women investigators to only women respondents in the household. Secondly to elicit more information on women's health we used a probe list (a list of 14 questions probing specific symptoms) as it has been generally found that many women do not perceive certain illnesses as 'illnesses'. Thirdly intensive training of investigators was given to make them sensitive to women's health problems and the difficulties that women have in articulating these. Lastly before the commencement of the survey meetings and repeated contact with the women in the community were held to have a good rapport.

The research design of the study was prepared using a mix of methodologies both from the quantitative and qualitative realm. As one of the main objectives was to document and analyze morbidity patterns, utilization & expenditures incurred by households on women's health, various tools for data collection were employed for eliciting information from different levels and in various depths. In the quantitative method the survey method of administering an interview schedule was employed as one of the major tools since one of the major objectives was to make estimations with regard to the perceived morbidity, utilization and costs incurred on illness and non illness events. This required collecting information from a large sample of households in the area selected. In the qualitative methodology in-depth interviews and interviewing key informants from the area selected was used in the study. In this report the analysis would be restricted to the findings of the survey conducted.

Area for study

Prior to the main study in Nasik district, it was felt necessary to undertake a study in Mumbai (now called Mumbai) city as it would sharpen our understanding and the design for the main study and to understand the issues of women's health with regard to Mumbai city. In Mumbai city selecting the area for our study we had two criteria in mind. Firstly an area which had an Non Government Organization (NGO) working with women or in the field of health and which could benefit from our survey and secondly an area which would reflect the cosmopolitan nature of Mumbai, people from different classes, localities and community backgrounds.

After short listing a few NGOs we selected the area where Jagruti Kendra a church based organization was working in central Mumbai which had a mixed population, with a higher preponderance of Muslims. Mumbai city for administrative purposes is divided into 26 wards by the municipal corporation. The area falls in `L' Ward of Greater Mumbai. This ward has a community of over 5-6 lakhs, which resides within the physical boundaries along the

Andheri - Kurla road bordering Saki Naka, Kurla, Sahar airport and Ghatkopar. It links western and central suburbs by link- roads. It is a congested pocket with residential as well as small- scaie units, factories and commercial units. It is reported to have poorly maintained water and sewerage systems, open drains, inadequate toilet and sanitation, insufficient quantity of water and suffers from acute noise and air pollution. In the same region is an open 'nallah', originally identified as 'Mithi' river, which is now used by industries for disposing of untreated industrial effluents. According to a survey in mid eighties this area had about 25 % of the chemical units located in Greater Mumbai. (*Jagruti Kendra: 1993, p 5-6)*

For the purpose of our research survey, we limited ourselves to one section in 'L' ward, the area known as Bail Bazaar. This is the stretch of land located between two areas, Safed Pool and Kamani industrial belt. Bail bazaar, is also popularly called Jari Mari, after its patron goddess, "Jari Mari". Jari Mari is located on airport land or very close to the demarcated airport boundary consisting of unauthorized structures which are open and most vulnerable to external threats of eviction and harassment. This is especially so after the Mumbai High Court decision to evict dwellers from land needed for development purposes and Central government premises under the Public Premises Act. *(The Independent, 7th Feb, 1991)*. At the same time they are protected by political parties who treat them only as vote banks. A majority of the population consists of migrants from Uttar Pradesh/ Tamil Nadu/ Kerala and Karnataka, belonging to middle and lower income class groups. They are mainly mill workers, or self- entrepreneurs, skilled and unskilled laborers, and service sector workers. There are private hospitals, one fairly big trust hospital (Holy Spirit Hospital), a Municipal Health Post and two municipal dispensaries at a walking distance of 15-30 minutes and three municipal hospitals at a distance of about half -to one hour distance. One can find about 13-14 general practitioners and about 5 -6 medical stores in the immediate vicinity. A parish school St. Jude which is a co- education English medium school serves approximately 3000 child population. Apart from this, there are also private and municipal primary schools for Hindi, Tamil, Kannada, Marathi and Urdu medium students. For secondary and higher secondary classes the students have to go either Kamani Municipal Marathi school, or Private Urdu school in Kurla, or in English medium St. Jude. There is also a 'Madarsa' for Muslim children which has 7 maulavis and about 500 children in the age group of 6-14 years. **(More details of area in Chapter III)**

Selection of the households

Our predetermined sample size was 425 households, considering that there would be approx 4% - 5% loss of sample. It was decided to have 60% from the Lower Income group, 30% from the Middle Income Group and 10% from the Higher Income group. In the area under study the households were grouped into various clusters we selected the clusters for selecting the households. These clusters were delineated using geographical boundaries such as walls, gutters and roads. The selection of the clusters was on the basis of their "class character", which we ascertained using certain indicators such as the occupation of its residents, the condition & size of their houses, the immediate environment outside the houses, access to facilities like water, toilets, electricity and the visible presence of goods such as televisions, refrigerators and vehicles. We were able to shortlist 5 clusters in the area for the purpose of our study. These were selected after discussions with the NGO, visits to the area, and based on our observations of what we considered as distinguishing factor of class. Each of these 5 clusters had a very distinctive character. Of these, two clusters were slums located on land belonging to the airport authority, two other clusters were 'chawls' (1 / 2 room tenements

built in rows) alongside a narrow lane. The fifth cluster was a group of apartment blocks housed in multi-storied buildings. Finally we covered 430 households from amongst the 5 clusters, namely Yellappa chawl, Kajupada, Shanti nagar, Sevak nagar and nearby flats, all located within an area of one square mile. Since we did not have lists of household units residing in these clusters we demarcated the area and counted the number of household units and excluded shops and establishments. Since we had decided on the sample size from each cluster, our random sample i.e. 'Nth' house was decided accordingly. The houses with only male persons was excluded from the sample.

Conduct of the study

Since we were dealing with a sensitive issue with regard to women's illness especially reproductive illness it was necessary and ethical to build a rapport with the women in our study. The rapport building phase of the study was intended to explain about our organization conducting the study, objectives of the study, information elicited methodology of the study and the outcome. This was carried out through a series of meetings in the clusters with the women, local organizations, key individuals among others. In addition to the meetings and individual contacts, we had a leaflet in Marathi and Hindi explaining about our organization and particulars of our research study. These leaflets were distributed widely among all members of the community especially women. For those who could not read the leaflet, it was either read out or the gist of it was explained. Many a times our address and telephone numbers were important considerations in building trust and faith in the community. The women also kept these leaflets for their family members to read and grant permission.

The fact that they had a choice in the matter, to say no to the Investigator, to refuse to share information fully, partially, selectively, eased out a number of fears. Another major `obstacle remover' was our promise of maintaining secrecy as a matter of right of the participant, keeping the names of individuals, families or other individual information from any kind of discussion, articles, reports or sharing with another member of the community and staff from our organization. We promised that we would publish only collated data and share only final analyzed data with the outsiders. Expectations about the outcome of the survey in the form of a health center, drug dispensation or reimbursement of expenditure on reported illnesses, were dealt honestly and without any false promises. The only outcome we stressed time and again was that this information would come back to them, given to organizations, institutions which could utilize it for improving the situation.

Training of investigators

The use of female investigators to interview women was one of the corner stones of our study. All the investigators involved in the study were from the 18-25 age group, and spoke and wrote in Marathi and Hindi. Before the commencement of the survey training was given to them. The training involved information about CEHAT and its projects. It also dealt with women's body, menstruation, conception, pregnancy, delivery, contraception and health problems, women's work and health problems, chronic illnesses like weakness, backache and pain during menstruation etc. which are otherwise not reported unless these are acute. The use of the questionnaire, the method of eliciting the required information, the assumptions and the need for all the questions was explained to them and the recording of it. They were also trained to go beyond the interview schedule by building good rapport with the women in

the clusters. The training stipulated the three tenets of field research, listen, probe and write Good rapport building, rights of the informants and respect for ethical values even while conducting the survey with time and space limits, was emphasized all through the training

Tools for data collection

The study was conducted during the month of July in 1996 The method used was of one time data collection and only if the woman of the house was not present or she requested us to conduct the interview on another day, the Investigators visited again. The study considered the women in the house as proxy for all the members in the household, especially children and other women. We appointed teams consisting of two investigators considering the sensitive nature of our study and to facilitate the smooth conduct of the interview. We went in for the survey method with an interview schedule to collect the major aspect of quantitative information as we were dealing with estimations related to perceived prevalence of illness, health related events in the life cycle of a women, utilization and expenditures incurred by households.

Reference period

The reference period has been one of the important aspects of this study as the information being elicited would depend on the respondents ability to recall from the past and provide the required information. It was decided that for information related to **illness the reference period would be for the month of June (30-day period)**. As we were eliciting sensitive information and conduct the data collection in an unhurried manner so that more space was provided to women respondents to articulate in the manner they considered appropriate, their health problems. Understandably due to this methodology the recall period lengthened to one & half months, as the reference period was kept constant. Any illness, including chronic that became acute in the reference period for each of the family members was recorded along with other details related to utilization and expenditure. With regard to **pregnancy, delivery, abortion and contraceptive used the reference period was for the last 1 year**. This was done so as to get a sufficient sample to make estimations and it was felt that for major events such as pregnancy, delivery, abortion and contraception the women underwent, it was relatively easier to recall the information related to utilization and costs.

The interview schedule

One of the major factors in the administered interview schedule that was taken into consideration was with regard to the flow of the interview and recording of the same. We divided the information sought into various sections on separate sheets of paper having different colors. Firstly we elicited information with regard to the details of the respondent, head of household, language spoken and address. Then we asked for the names of all the family members in the household and for each of them details regarding their sex, age, relationship to the head of the household, education, occupation, martial status and number of children.

For each of the family members the woman respondent was asked about all the episodes of illness experienced by all the family members in the month of June 1996. Following this, the respondent was read out a list of 14 specific symptoms **(refer Annexure 1)** of illness were probed for all women above the age 12 years. The investigators recorded the verbatim

response of the women interviewed. These verbatim responses, in the section covering morbidity, provided us with list of symptoms suffered. This was done as we have mentioned with the understanding, as the perception of illness especially with regard to women is different. Many illness affecting women do not get reported by women as they do not perceive them as illness. This methodology of understanding women's illness proved very useful as we found that woman when asked specifically with probes said that they had the problem but never understood it as illness. Further they were asked whether any women in the family was pregnant, had delivered, had an abortion in the last one year. Information with regard to contraceptives being used both spacing and terminal methods were addressed to both men and women in the family in the last one year.

After the recording of the above information in the family profile section of those who had responded saying they were ill, a separate illness card was administered to each of the individuals who had fallen ill. The information in the illness card was recorded with regard to the episode number, symptoms and causes, period of illness, if chronic illness period, health facility utilized, treatment taken, if treatment not taken reasons, distance of facility utilized, mode of transport, who accompanied, number of visits, number of days lost due to illness both for the person and family members. From the above information the expenditure incurred was asked for each of the heads such as doctors fees, expenditure on medicines, injections, tablets, tests, surgery, hospitalization, transport, rituals performed, special diet, bribes, gifts paid, etc. Effort was taken to get the information recorded separately for each of the above heads mentioned. Where the information was not available separately they were put together.

A separate card was filled for those women who were pregnant, delivered, had an abortion were undergoing post natal care after an delivery or abortion in the reference period. The information recorded in this section was mainly with regard to the specific event, the date and place, information regarding complications if any, health facilities utilized and the reasons, type of services received, who provided, distance of facility utilized, mode of transport, who accompanied, time spent in the facility, number of visits, number of days lost to persons and family members. As with the illness card the expenditure was recorded separately for each of the heads information. In this card women who had delivered or had an abortion, details of their postnatal care was also recorded separately including their costs. The detailed information with regard to contraception was recorded only for women who were using spacing method or a terminal method in the reference period. The information sought was with regard to the method used, date, health facility utilized, services provided during the procedure and after, who provided the services, complications / problems if any during and after, distance of facility utilized, mode of transport, who accompanied, time spent in the facility, number of visits, number of days lost to persons and family members. As with the illness and event cards the expenditure was recorded separately for each of the heads information mentioned.

After eliciting the information with regard to illness, events and contraception the interview sought information with regard to the sources of finances for the expenditure incurred. In this we sought information with regard to the total expenditure incurred by the household and method of meeting the expenditure. Effort was also made with regard to the reimbursement for the health care, compensation paid etc. In this report we have not analyzed the sources of finance, as the data is not complete. After the recording of information related to illness / events we sought information with regard to the socio economic condition of the household.

The information sought in this section related to number of years of stay in the city, ownership of the house, physical aspects & structure of the house, information related to drinking water, bathroom & toilet, purchase of grains & availability of food, assets owned and income.

Problems encountered

Conducting this kind of study has its own problems and we had our fair share of them, they are given below.

The first dilemma we faced within us was with regard to the use of probes as a methodological issue in an household survey. At one end through our earlier household studies we faced the problem of non reporting of illness by the women especially those of reproductive nature and those not perceived to be illness such as weakness, vision problem, ear problem, mental illness, infertility etc. At another end the use of probes is inherent in its nature the aspect of suggesting to the respondent. The probe questions were asked with a lot of diffidence. The presence of outsiders, males or senior family member at the time of interview discouraged the responding woman as well as the investigators. Sometimes the probes on chest problems was reduced to only `cough and cold probes' and skin problems to merely scabies, itches etc. The significant probes on reproductive illnesses were difficult to handle even for our experienced investigators in the beginning. We promised to rethink if they would try out the probes for atleast a few days. This strategy proved successful since the investigators got over the diffidence and found the women responding positively and with a lot of openness. However, we continued to face problems on some probes (like sexual health) for women in the age group of 50 and above. In this section we were not able to differentiate between the no response and no questions asked by the investigators.

The nature of the household survey presents its own set of problems especially with regard to this kind of a study. Women are not accustomed to the survey format and generally are comfortable while `narrating'. Although the schedule was framed considering the flow of information that is logical in its questioning, the women did not always respond in that manner. It was especially difficult to get them to answer on each of the treatment and health facilities utilized and expenditure for each of the episodes. Problems also arose in seeking answers to questions on contraception use and illness probes. Regarding contraception, the investigators had difficulty in probing for contraceptive use, especially natural cycle method, multiple contraception's utilized in the reference period. Similarly, we missed out on more than one event in one year especially regarding abortion.

There were problems in the selection of the households in the clusters as there were no reliable households lists containing family data available with any authority. We had to physically count the houses in the clusters to take a sample. As we had taken the sample from each of the clusters in terms of the Nth number by physically counting, we encountered households with only male members. This was creating problems with regard to our Nth number from that particular sample. We excluded these households from our sample and took the next house.

Another problem relates specifically to the city of Mumbai due to its housing shortage. Many households from a higher economic strata would be living in the slums due to the housing

shortage. It was difficult to demarcate the households in the clusters based on the socio economic criteria.

The women respondents were unable to provide the income of the household members. This problem is not unique to this study only, but becomes more problematic as the women in the households do not have access to the information with regard to the income. Due to the inadequate data on income of the households we were not able to develop a class scale to analyze the findings of the study.

In our class based strata for cluster and sample selection we had paid very little attention to religion and caste. We realized that our study had a majority of Muslim population and it was difficult to change this.

One of the major problems faced by the investigators was in recording information in which the husband or another person had made payment at the various facilities. As we had interviewed women in the household and it is well known that the purse strings are controlled by the head of the household or the main earner who invariable happens to be a male member. In some cases the women respondents were unable to provide the break up of costs incurred and could only provide the combined costs incurred.

Analysis

The quantitative data that was collected was firstly coded into separate files using the ASCII format. There were separate files made which contained information regarding household, individual, illness and non illness events. The data was cleaned for wrong entries & coding through a process of cross checking. The key variables were categorized. The data was analyzed using SPSS, windows package.

CHAPTER III

Social and Economic Profile

In a study of this nature, it is important to understand the background of the individuals and households. Specifically, the position of the women in the sample must be understood in relation to the household and in relation to the general population. The situation of women in the community depends on many factors, which are at work in the household as well as outside, in spheres such as the labour market, the industrial scene, and the education system and government policy on housing. This analysis will help us to understand the variations that exist within the city's population and anticipate how and to what extent our findings would represent the situation of health care in the city.

The Metropolis

Mumbai is one of India's largest cities and an important commercial and industrial center. According to the Census, Mumbai had a population of 99.26 lakhs in the year 1991. In the 1981-91 decade, the population had grown at the rate of 1.8 % per annum. Interestingly, the female population had grown by 27.15 % in the previous ten years, while the male population grew by only 17.34 % in the same period. The reasons for this change in the gender composition of the population is very significant. Mumbai was historically regarded as a city of migrants. This is borne out by the fact that migration contributed 79.7 % to the increase in population between 1941 and 1951. These migrants were generally males, who arrived alone searching for work. In 1951, the sex ratio in Mumbai was 603. Since then, two processes have been underway. The sex ratio has become much more balanced, (1222 males for 1000 females in 1991) and births contribute a large share to the growth of population. This is because there has been a significant increase in the proportion of females between 15-54 years in the total female population. i.e. women in the reproductive age. All these statistics indicate that Mumbai's population is becoming more settled, with families replacing the all male households of earlier years. Another change that has taken place is that more and more women are entering the labour force. The female work force participation rate rose from 8.8% in 1961 to 10.5% in 1991. A large proportion of employed women find work in the unorganized service sector.

Area of study

The situation in Kurla (L ward), the area of study is distinct in many ways. All the older industrial and commercial wards have the lowest sex ratios in the city; Colaba, Marine Lines, Byculla, Parel, Elphinstone Road and Kurla, all have sex ratios below 800. Kurla's sex ratio was 767 in 1991. The sex ratio of the census block No. 78, Bazargate -Church hall, within whose limits all the selected households are located, had an even lower sex ratio at 742. The sex ratio for the population above six years of age in the block was lowest at 712. This accounts for the large number of all male households that were encountered and excluded from the survey. The female literacy rate for the census block stood at 69%, 18% less than the male literacy rate, while for Mumbai, the average difference between the male and female literacy rate is 12%. The female work force participation rate for census block no. 78 was a low 6.72% in comparison to the Mumbai figure of 10.5%.

Kurla ward witnessed a sharp increase in the population and density in the 1981-91 decade, the density increased from 17161 persons per square kilometer to 45775 persons. Kurla has traditionally been an industrial area. Inspite of the unfavorable living conditions, industrial areas attract a working class population because, for them, the availability of employment close to home outweighs the disadvantage of living in a degraded environment. With the present government policy on land ownership and development, most of the 'unauthorized' houses of the working class are not served by any public amenities. Infrastructure for the disposal of waste and distribution of water as well as approach roads are not provided. Thus, due the pressure of unregulated industrial activity and high density of population, working class neighborhoods are generally associated with deteriorating infrastructural facilities and a highly congested and polluted environment. *(Ramasubban et al. 1996)*

Characteristics of households

Language & Religion : Looking at the overall distribution of households by language, we find that the Hindi speaking population predominates to a very high degree. These Hindi speakers include both Hindus and Muslims. We find that the Hindu and Muslim households are nearly the same in number. Christians comprised of 8.1% of all households, while Buddhist households accounted for 3.5% of all households **(Table 3.1 & 3.2).**

Number of years of stay : One indicator on which we collected information was on the number of years for which the family (usually the head of the household) had stayed in the city. 18% of the heads of the households have been born in the city **(Table 3.3).** Another 34% of them have lived in the city for more than 15 years. Only 17% of the households have been settled in the city for less than 4 years. Greater experience of life in a metropolitan city implies a stronger social support network, better employment opportunities, a greater understanding of systems such as a large public hospital or a municipal corporation office. Though access to the above seem, logically, related to education and skill, it cannot be completely explained by these factors. Experience of life in a big city is in itself educative and thus, it is a significant determinant of the opportunities available to all persons, especially women.

The houses : More than two thirds of the households interviewed lived in 1 room tenements. Barely 7% of the households had more than 2 rooms (including kitchen) for their use **(Table 3.4)**. However, considering that this locality is very old, we find that a large majority of the households are housed in permanent structures, More than 70 % of the houses have walls of cement and concrete. We find that the density of population in the slum pocket of Sevak Nagar is 4.42 persons per room, while it is 2.14 persons per room in the apartment blocks.

Ownership : We find that 67% of the households own the homes they live in **(Table3.5)**. However, ownership of the house, in this case, is a very poor indicator of economic status. We find ownership to be highest at both the lower and upper end of the spectrum. The reason being that those living in unauthorized tenements are also owners of the houses, that many times, they themselves have constructed.

Facilities : In addition to the overcrowding, the facilities available to the households reveal a similar condition of inadequacy. 60 % of the households rely on public toilets, another 27% are dependent on the common toilets of the chawl. Only 13% of the household have an independent toilet and 11% of the households had a separate bathing facility. An

overwhelming majority of the families made use of an open mori built inside the house Our observation of life in this area made it evident that the open mori arrangement placed great restrictions on the women of the households. Having own tap was much more common with one fourth of the households enjoying this facility. 65% of the households depended on the tap of the chawl and 8.1% were dependent on public taps **(Table 3.6).** Inspite of this, it was not uncommon for women to be up at midnight or even later in order to fill water for use the next day. Those who relied on common chawl taps were more privileged than users of public taps as they could restrict access by locking the taps. Even among this group, there was a hierarchy between those who had applied and paid for the water connection and those who paid rent to use to use these taps. The former group had priority in the use the common chawl taps.

Slum & Non Slum

As mentioned in Chapter II (Study design & Methodology) a total of 430 households were covered from the 5 clusters **(Table 3.7).** As is evident from the table, the number of households interviewed in each cluster are not equal. The clusters themselves were very heterogeneous, in terms of both social and economic features. Although most of the households in the study suffer from the impact of the environmental problems so characteristic of an industrial area such as Kurla, the immediate environment of their houses varied considerably. Typically, in Mumbai, one finds that the physical condition of areas in close proximity to each other can vary dramatically. The 'cheek by jowl' presence of high, middle and low income settlements is well known. Nowhere are the attempts to prevent the deterioration of the few feet of common space between houses and the effort to isolate the settlement from the influence of highly polluted surroundings as evident as in this area.

We decided to use the slum and non slum category to analyze our data so that we could better understand the impact of environment on the health of all individuals, and of women in particular. This classification of households into slum and non slum has been done on the basis of our observation of the physical conditions of the settlements that we selected for the survey. Defining what constitutes a slum can be a matter involving considerable confusion. 'Slum' is not as objective a category as we would have liked. We defined an entire cluster as a slum on the basis of the degradation of the immediate environment that we observed. Non slum settlements being those which were characterized by covering of the drains adjoining the houses, paving of the common lanes between the rows of houses and the separation on the garbage dumping and defecation areas from the houses.

Using this classification, we have 178 non slum households comprising of 905 persons, 252 slum households having 1244 persons **(Table 3.8).** The structure of only 6 of the non slum households was not entirely constructed out of cement concrete. While 119 slum households were not housed in permanent structure. There was a similar disparity in the amenities available. 59% of the non slum households had their own water connections, while only 5 households in the slum had the same facility. 82% of the slum households used municipal toilets and only 2 had their own toilet. On the other hand, 30% of the non slum households had their own toilets and only 29% used municipal toilets. Although 41% of these households used toilets reserved for residents of the chawl, these were decidedly better maintained than similar toilets used by 16 % of the slum households.

Characteristics of people in the study

Respondents : A large majority of the households had only 1 respondent. This respondent was in most cases, a married woman in the reproductive age group between 20 to 45 years of age. In practically all cases the respondent belonged to the immediate family of the head and thus, we find that all the respondents were well placed to answer questions on the household.

Heads of households : An overwhelmingly large proportion of the heads of households were males. Only 10 % of the households had female heads **(Table 3.9).** If we examine by the marital status we find that married men and single women are most likely to be reported heads of households. This indicates that marriage grants the status of head to men, while the break-up of marriage through divorce or widowhood confers the same status on women. The age of the male heads of households is seen to be largely between 25 and 45 years. The female heads of households tend to be on average much older than the male heads. To complement this, we find that the majority of them are also widows. Interestingly, 29 male heads and 24 female heads were not contributing to the household income. They were reported as housewives or non earners. A deeper analysis of this reveals that wives and children of non earning male heads and only children of non earning female heads were the main breadwinners in such families. However, when the heads are employed, we find that the male heads of households tend to be in much more privileged and remunerative occupations. They are also invariably the main earners in their households. The female heads of the households are spread across the occupational range, but none higher than skilled or lower level service sector workers. None of the female heads were in professional jobs. This leads one to believe that, on the whole, female headed households, which are sustained by that woman's work may in fact be surviving with difficulty. It would be important to study the effect of this on the health condition of the woman, when she may have control of resources but not too many resources to control in the first place.

Size & Composition : We find that the size of the households varies considerably, the average size of the household is about 5 members (4.99), with nearly 43 % of the households having less than 5 members. This is in consonance with the finding that most families were nuclear. There were a total of 2149 individuals living in the 430 households interviewed. We find that the sex ratio (937) in our sample is markedly higher than that of the city as well as the ward and census block. This is on account of the exclusion of all male households from the study. Also, the extremely small number of aged persons describes the predominantly young and largely nuclear families that we found. More than 90% of the population was below 46 years **(Table 3.10).** Also, we find that the child population in our sample is not very large, similar to the pattern of the city. This may be on account of the relatively lower birth rate of the city. There is not much significant difference in the age structure of the male and female population. Only, we find comparatively fewer women in the age groups of 35 years and above than men.

Employment : About 34% of the individuals in the sample were employed. **(Table 3.11)** The main group of persons who were employed in this sample was the adult men. The incomes of male workers are significantly the main source of income for the households. The maximum number of workers were found in the skilled workers category and employed in small units in the unorganized sector. We also find that unemployment among the men of different age groups varies considerably **(Table 3.12).** However, the pattern that we observe is very unusual. As expected, unemployment among men between 18 and 25 is high which declines

in the next age group, only to rise again among the older men. In terms of numbers, almost twice as many men in the 36-45 age group are unemployed as in the 26-35 age group and the unemployment being the highest in the old age group of above 45 years of age. Thus, one's assumption that the middle aged male population would be most secure in terms of employment is belied. To complement this, we find that only half as many men in the older age group are working in unskilled and semi skilled jobs as the younger age group, indicating that young men are entering the labour market as lowly paid workers. Analysis of work status in relation to educational level shows interesting trends. Non workers are distributed all across the spectrum, although illiterates and those with only primary education are most likely to be unemployed. However, increasing education does not seem to diminish the dangers of remaining unemployed substantially. This seems to confirm a grim picture of increasingly constrained opportunities and subdued growth.

Cash income : The respondents were asked to report the monthly income of the households from all sources, the information received on this aspect was very unreliable. The general tendency was to underestimate the monthly household income. Nearly 14% of the households did not report any figure at all. In other cases, the women respondents had no access to reliable information on their husband's income. The self employed reported their income very tentatively, arguing that it was not possible for them to calculate their profit accurately. They as well as the casual workers both argued that there were wide fluctuations in their income over time. For the latter group, it was a little easier to estimate the monthly income. We assumed twenty working days a month and multiplied that figure with their daily wage. However, it is likely that they would, in fact, find employment for fewer days than that. Inspite of all these limitations, we have analyzed the income of those who reported. We find that about 9% of the households have a monthly income of Rs. 1000 or less **(Table 3.13).** Assuming an average family size of five members, this means a monthly per capita of Rs. 200 or less. Another 24.4 % of the households have an income between Rs. 1000 and Rs. 2000. About half the households (47.4%) have a monthly income between Rs. 1000 and Rs. 3000. A substantial 17.9 % of the households reported an income of more than Rs. 3000 per month.

Sources of income : *We* find that the households in the study reported salaries as their main source of income and a large proportion of them reported only one source of income **(Table 3.14)**. Both these indicate a considerable measure of economic stability in the population. Of the few households who have a subsidiary source of income, those with salary as their main source of income supplement it with income from self employment (25 households) & casual labour (12 households).

Services & assets : In the absence of reliable information on income, data on assets is a valuable indicator of the level of resources that the households has access to. In the urban context, the source of procuring food is an important indicator of the presence of poverty or its absence. Nearly 78% of the households had a ration card, but we found that 53% of the households bought cereal food grains in the open market, although they had a ration card **(Table 3.13)**. Another 15% of the households were compelled to buy grains from the market because they had no ration card. Only 25% of the households used the public distribution system, either for buying all their cereals or part of it. The ration card was used mainly to buy kerosene and sugar, indicating that the majority of our households were economically stable enough to exercise the option of not consuming subsidized food grains. About 13% of the households reported facing scarcity of food at some point or the other. Of these, the largest number faced food shortage because money ran out before the end of the month (30

H'holds), they could not find work (6 h'holds), income was not sufficient (14 h'holds) and because there was large seasonal variations in their income (4 h'holds).

In terms of assets **(Table 3.15 & 3.16)** we find that most of the households (84%) possessed no income generating assets. The most valuable asset that 30 households possessed was a fixed asset such as a house, godown, shop or garage. 176 households owned some agricultural land in their native villages, but they generally did not derive any regular income from it. Ownership of certain specific assets was asked for, these included the type of vehicle owned, television, radios, refrigerators and the type of fuel used. We find that reliance on kerosene stoves is the highest with 75% of the households using this for cooking. However, ironically, far more households possess televisions (42% B/W, 16% Colour) than they do gas stoves. Admittedly, televisions are no longer considered a luxury, but the fact that they have priority over cooking gas creates interesting questions. Cooking gas eases the burden of cooking to a considerable extent. Inspite of this, it is one of the last acquisition in lower middle class households. Is this on account of the fire hazard that storing a cylinder poses (in which case, stove related accidents are much more common and pose a much greater danger to a woman's health and life) Or is it because the gains from owning a television accrue to all family members, while the disadvantages and dangers of using a kerosene stove, and the time spent in acquiring kerosene from the PDS system and other sources are borne only by the woman of the household. Though this question has marginal relevance to our study, it seems like a very telling indicator of the marginalisation of women's concerns in the way resources are distributed in households who are well above the subsistence level.

Characteristics of women in the study

Position in the household : There were 1036 female individuals in the 430 households interviewed. The largest group of women was that of daughters (45.5%) followed by wives (36.6 %) thus indicating that most women were immediate relatives of the heads of households. **(Table 3.17)**

Marital status : An analysis of the marital status of the women reveals that only 6 married women were below 18 years of age, which is the legal age of marriage. However, by 26 years, nearly three fourths (74.4%) of the women are married **(Table 3.18).** By the age of 36, all the women had been married at some point in their life. The proportion of widows and single ever married women increases with each older age group, till we find that among the oldest women (46 years and above) half the women are single. Marriage still seem to be an imperative role for all women, as can seen from the fact that only 4 women above the age of 25 years are still unmarried. It also appears that remarriage, especially for older women, is still very difficult or unacceptable, considering the fact that half the women above 45 years were single, inspite of the fact that there are fewer women in the older age groups than men. We may conclude that the wide gap between the ages of husbands and wives must be the reason why so many women outlive their husbands. We found the average difference in age between husbands and wives to be 7 years. It is often preferred that a wife should be considerably younger to her husband as it insures her 'obedience' to him. The consequences that this difference in age has for a woman's authority in the household is, therefore, predictable. Being younger, necessarily less educated and skilled means that she is disadvantaged not only on account of her sex, but also on account of her age.

Surprisingly, only 6 women were reported as separated or divorced from their husbands. However, it is likely that this category is much larger and many such women have been reported as married and cohabiting. Another category which is likely to be larger is of those women whose husbands live away from home due to work. Understandably, there was a reluctance on the part of these women to report the absence of their husbands to strangers. On the whole, however, we find that the group of married and cohabiting women, i.e. the group which is almost certainly sexually active, is the largest group.

Number of living children : In terms of the number of living children that the ever married women have, we find considerable differences within different age groups. We find that on an average, women between 18 and 25 years have one child (mean = 1.25), for those in the older age groups, 26 to 35 years, the mean is 2.85 children per woman **(Table 3.19).** This average increases to 3.49 for women in the 36 - 45 age group and rises marginally to 3.77 for the oldest women (46 years and above). If we assume that child survival has improved considerably over the years, it means that the number of pregnancies and deliveries that the younger women have experienced would be even fewer in comparison than the data on living children suggests. Unfortunately, we do not have any direct information on the number of pregnancies or deliveries that women have had. We find that only 11 married women beyond the age of 25 years have no children, indicating that childlessness (which is not treated) is not very common.

Education : We find that the literacy rate for the women in the age group of 12 and above is 70%. However, the literacy rate for the female population above 7 years is 74%. The female literacy rate for the city stood at 75.8% in 1991. This means that illiteracy is fast declining among the women in our sample. We find a definite correlation between education and employment.**(Table 3.22)** 83% of the illiterate and those with primary education were housewives. 65% of those with secondary education were housewives. The employment rates for matriculates and those with higher education was progressively higher. More than half of these women were employed. Thus, we find in the context of Mumbai that completing school and entering college vastly improves the chances of a woman being employed. While those with the least education are also employed, they are most likely to be unskilled and semi skilled jobs, both laborious and less paying. With education, the opportunities for self employment, a service sector or professional job increase greatly. Consequently, the gains to women from employment increase greatly. Even without relating it to employment, education is an empowering experience.

Employment : We find that the a large majority of the women in our sample have not even entered the labour market. The female work force participation rate for our sample is 10.71%, which is marginally higher than work force participation rate for Kurla (7.1%). An analysis of the type of employment indicates that women are not very favorably placed.**(Table 3.20 & 3.21)** We find only 2% (21 women) of the women employed in large units in the organized sectoror in secure government jobs. The large majority were employed in the completely insecure household sector, in casual labour or in small units in the unorganized sector (89 women). However, the number of women working is itself very small. We, thus, find that a large majority of the women earners are not protected by either social legislation, e.g. maternity benefits, or social welfare, e.g. health insurance. While for the rest of the women, there is not even direct access to income on account of being non earners.

There are, however, indications that employment in poor households may not improve women's' access to resources. There is no conclusive evidence to suggest that women will spend more on themselves if they have an independent income, their control on their income may itself be very poor. An analysis of the relationship of employed women to head of household shows, apart from female heads of households that they are generally wives and daughters among those employed, who are largely supplementary earners. Thus, neither is their income the most significant in the household nor are they in positions of authority in the family. Inspite of being supplementary earners, women are often the main providers in the family. Kalpagam states that "ultimate responsibility of running the household... of every day getting at least a minimal amount of food for all, of entertaining friends and relatives, of finding funds for emergencies and then servicing that debt, lies with the women. Obviously, gender relations within the family are much more complex than a straight-forward man-woman exploitation" *(Kalpagam, 1983; pg 136)* This means that though their incomes are more meager compared to the men, their responsibility towards meeting household expenses is far greater. In such a situation, women may spend even less on themselves, than they otherwise would.

Table : 3.1 Distribution of Households by Language spoken

Language	% of Households Eastern Suburbs	% of Households Greater Mumbai	% of Households In the sample
Marathi	43 7	42.6	16 7
Hindi	6.1	8.6	45 8
Urdu	7.0	6 5	8 1
Tamil	4,4	2.1	8.1
Kannada	2.5	1.8	5 3
Tulu	*	*	2.3
Konkani	*	*	2.6
Gujarati	13.3	18.6	5.1
Malayalam	4.2	2.2	2.8
Telegu	*	*	.7
Bengali	*	*	.2
Any other	11.4	13.0	2.1 $
Total	100.0	100.0	100.0

Source: BMRDA - ORG 1989

Note : Total Households (N=430)

: * included in 'Others'

: $ includes all languages marked 'Others' in BMRDA - ORG SURVEY 1989

Table : 3.2 - Religion wise distribution of households in Greater Mumbai and our sample

Religion	% total hhlds in Mumbai	% of hhlds in Sample
Hindu	73.9	45.6
Muslim	14.2	42.3
Christian	3.4	8.1
Buddhist	3.6	3.5
Any Other	4.9	.5
Total	100	100

Source: NSSO, 43rd round 1987-88

: Total households in Sample (N=430)

Table : 3.3 - Cluster-wise distribution of households by years of stay in Mumbai

Years of stay	No. Of households
Less than four years	74 (17.33)
4 - 7 years	35 (8.20)
8 - 10 years	41 (9.60)
11 - 15 years	54 (12.65)
More than 16 years	146 (34.19)
Since birth	77 (18.03)
No response	3 (.8)
Total	430 (100.0)

Figures in brackets indicate %

No.of rooms available for household to use (including Kitchen)							
Family size	1	2	3	4	6	No response	Total
1-4 persons	132	35	15			1	183
5-8 persons	147	62	15	1			225
9-13 persons	10	7	3		1	1	22
Total	**289**	**104**	**33**	**1**	**1**	**2**	**430**
% of Total	**67.2**	**24.2**	**7.7**	**0.2**	**0.2**	**0.5**	**100.0**
Greater Mumbai, '91(%) *	**72.9**	**18.0**	**6.4**	**1.8**	**0.9**	**-**	**100.0**

Source: * Deshpande Sudha & Deshpande L.K. Urbanisation and growth of Large cities in Developing countries - A case study of Mumbai, ILO. Geneva; Census of India 1991, Housing Tables, Mumbai

Table : 3.5 Distribution of households according to ownership

Ownership Pattern	**% of H'holds**
Owned by household	67.4
Rented	19.5
Paghadi	7.7
Any other	5.1
No response	.2
Total	100

Total Households (N=430)

Table : 3.6 Infrastructure

Infrastructural facility	**No of Households**
Type of wall	
Tin sheet	79 (18.4)
Cement sheet	3 (.7)
Cement concrete	304 (70.7)
Half pucca, half kaccha	43 (10.0)
No response	1(.2)
Type of toilet facility	
Municipal toilet	258 (60.0)
Reserved for residen	114 (26.5)
Own toilet	55 (12.8)
Any other	1 (.2)
No response	2 (.5)
Type of bathing facility available	
In the open	1 (.2)
Mori	379 (88.1)
Bathroom	48 (11.2)
No response	2 (.5)
Source of drinking water	
Public tap	35 (8.1)
Tap of chawl	282 (65.6)
Own tap	110 (25.6)
No response	3 (.7)
Total	**430 (100)**

Figures in brackets indicate %

Table : 3.7 **Number of households interviewed in each cluster**

Cluster	Number of Households
Yellappa Chawl	87
Shanti Nagar	115
Karupada	45
Apartments	46
Sevak Nagar	137
Total	430

Table: 3.8 **Living Environment of Households**

Condition of the House	Households		
	Slum	Non-Slum	Total
Structure			
Pucca	133 (53)	172 (97)	305 (71)
Non-Pucca	119 (47)	06 (03)	125 (29)
Water supply			
Own water connection	5 (02)	105 (59)	110 (26)
Public water supply	247 (98)	73 (41)	320 (74)
Toilet facility			
Own toilet	2 (1)	53 (30)	55 (13)
Public/common/Open space	250 (99)	125 (70)	375 (87)
TOTAL: (N)	**252 (100)**	**178 (100)**	**430 (100)**

(Figures in bracket are column percentages)

Table : 3.9 **Heads Of Households**

	Heads of households	
Age-groups	**Male**	**Female**
18-25	33 (8.5)	1 (2.5)
26-35	155 (39.8)	6 (15.0)
36-45	112 (28.8)	12 (30.0)
46-97	87 (22.4)	21 (50.0)
Missing	2 (.2)	1 (2.4)
Marital Status		
Never married	1 (0.3)	-
Currently married and cohabiting	382 (99.0)	6(14.6)
Widow / widower	6 (0.8)	30(73.2)
Husband away at work	-	1 (2.4)
Seperated/divorced/ deserted	-	3 (7.3)
Any other(living in, e.t.c)	-	1 (2.4)
Earning status in the household		
Non earner	30 (8.2)	2 (9.1)
Main earner	286 (80.8)	12 (29.5)
Supplementary earner	17 (4.8)	6 (13.6)
Equal earner	22 (6.2)	1 (2.3)
Housewife		20 (45.5)
Missing	34	
Total	389 (100)	41 (100)

Figures in brackets indicate %

Table : 3.10 Age-sex wise distribution of the sample

	Sex of person	
Age-groups	Male	Female
0-4	133 (12.1)	138(13.3)
5-11	193 (17.6)	198 (19.1)
12-17	133 (12.1)	124 (12.0)
18-25	207 (18.8)	207 (20.0)
26-35	209 (18.9)	194 (18.8)
36-45	128 (11.6)	103 (9.9)
46-97	100 (8.8)	69 (6.9)
Missing	10	3
Total	1113	1036

Figures in brackets indicate %

Table : 3.11 Employment

Occupational status of all individuals

Type of occuaption	Illiterate primary		Secondary		S.S.C		College, e.t.c		N.Resp		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Student	339	42.4	198	31.2	21	8.9	46	22.8	13	50	617	32 5
Unemployed	30	3.8	39	6.2	16	6.8	4	2.0		0	89	4.7
Housewife	223	27.9	163	25.7	47	20.0	24	11.9	2	7.7	459	24.2
Non workers	18	2.3	5	0.8	1	0.4	1	0.5		0		0.0
Sub total	*610*	*76.3*	*405*	63.9	*85*	36.2	*75*	37.1	*15*	57.7	*1165*	*61.4*
Unskilled /hawkers	64	8.0	28	4.4	12	5.1	5	2.5	7	26.9	116	6.1
Skilled/ service sec.	109	13.6	173	27.3	103	43.8	67	33.2		0	452	23 8
Professional/ Business	4	0.5	15	2.4	27	11.5	46	22.8	1	3.8	93	4.9
No response	13	1.6	13	2.1	8	3.4	9	4.5	3	11.5	46	2 4
Total	800	100	634	100	235	100	202	100	26	100	1897*	100

* 252 children below fourteen years were non school/ non working

Table : 3.12 Occupational status of adult males by age groups

Type of occupation	Age group									
	18-25 years		26-35 years		36-45 years		46 years & above		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Student	24	11.6	2	1.0		0	1	1	27	4 2
Unemployed	17	8.2	5	2.4	8	6.3	21	21	51	7 9
Non workers	2	1.0	0	0.0		0	2	2	4	0 6
Sub total	*43*	20.8	7	3.3	*8*	6.3	*24*	24	*82*	12.7
Unskilled /hawkers	29	14.0	23	11.0	7	5.5	9	9	68	10.6
Skilled/ service sec.	116	56.0	138	66.0	82	64.1	43	43	379	58 9
Professional/ business	13	6.3	29	13.9	24	18.8	9	9	75	11 6
No response	6	2.9	12	5.7	7	5.5	15	15	40	6.2

Table : 3.13 Other Charactrestics of the households

Monthly income	No of Households
Upto 1000 rupees	39 (9.1)
1001-2000	105 (24.4)
2001-3000	99 (23.0)
3001-4000	47 (10.9)
4001-5000	30 (7.0)
More than 5001	48 (1.2)
No response	62 (14.4)
Whether household has ration card	
No	69 (16.0)
Yes	334 (77.7)
Any other	1 (.2)
No response	26 (6.0)
Source procures grain	
From market because no card	64 (14.9)
From ration shop	43 (10.0)
Have card but from market	229 (53.3)
On other person's card	1 (.2)
Any other	5 (1.2)
Both ration and open	66 (15.3)
No response	22 (5.1)
Period and reason for scarcity of food	
Never insufficient	373 (86.7)
At the end of the month	30 (7.0)
Due to expenses incurred on illness	1 (.2)
Can not work, can not find work	6 (1.4)
Seasonal nature of work	4 (.9)
Insufficient income	14 (3.3)
No response	2 (.5)
Total	430

Table : 3.14 Source of income

Main source of income	Number of households
No income	3 (.7)
Salary	235 (54.7)
Casual labour	73 (17.0)
Self employment	100 (23.3)
Agriculture	1 (.2)
Pension	4 (.9)
Renumeration from members working outside Mumbai	1 (.2)
Any other	4 (.9)
No response	9 (2.1)
Total	430 (100)

Table : 3.15 Assets

Income generating assests owned	No of households
No assets	364
Small machine, iron	17
Vehicle	14
Godown,shop, garage	20
House, Attic	10
Any other	2
No response	3
Any other assets	
No assets	407
Shop, Godown, garage	2
House	12
Any other	7
No response	2
Agricultural land owned	
No argicultural land	251
Yes, but no income	168
Yes, income in kind	8
No response	3
Total	430

Table : 3.16

Type of fuel used	Number of Households
wood,straw, coal	2 (.5)
Kerosene	322 (74 9)
Cooking gas	103 (24.0)
No response	3 (.7)
Type of vehicle	
Does not own vehicle	360 (83.7)
Bicycle	29 (6.7)
Scooter, motorbike	17 (4.0)
Tempo, truck	1 (.2)
Any other	1 (.2)
Autorickshaw	10 (2.3)
Private car, taxicab	10 (2.3)
No response	2 (.5)
Television	
Do not possess	176 (40.9
Black and white	182 (42.3)
Colour	69 (16.0)
No response	3 (.7)
Refrigerator	
Do not possess	360 (83.7)
Yes	67 (15.6)
No response	3 (.7)
Radio, tape recorder	
Do not possess	234 (54.4)
Yes	189 (44.0)
No response	7 (1.6)
Total	430 (100)

Table : 3.17 Position In The Household

Relationship of women to head of household	
Relationship	**Number of Women**
Self	41 (4.0)
Parent	17 (1.6)
Sibling	9 (0.9)
Spouse	379 (36.6)
Child	471 (45.5)
Grandchild	46 (4.4)
Parent in law	5 (0.5)
Any other relative	18 (1.7)
Not related	3 (0.3)
Son/ daughter in law	47 (4.5)
Total	1036 (100)

Table : 3.18 Marital status by age groups for females

	Age groups						
Marital status	**0-4**	**5-11**	**12-17**	**18-25**	**26-35**	**36-45**	**46-97**
Never Married , Engaged, married but not yet cohabiting	138 (100)	198 (100)	118 (95.2)	52 (25.1)	4 (2.1)		
Currently married & cohabiting, living in. Husband away at work			6 (4.8%)	153 (73.9)	182 (93.8)	91 (88.3)	35 (50.7)
Widow , Seperated/divorced/ deserted				1 (.5)	8 (4.1)	12 (11.7)	33 (47.8)
No response				1 (0.5)			1 (1.4)
Total	138	198	124	207	194	103	69

Table : 3.19 Number of living children for ever married women by age group

	Number of living children							
Age-groups	**Mean no. Of living children**	**Nil**	**1-2 ch**	**3-4 ch**	**5 or more**	**NA**	**N.R**	**Total**
12-17	0.14	5 (4.0)	1 (0.8)			118 (95.2)		124
18-25	1.25	47 (22.7)	87 (42.0)	20 (9.7)	1 (0.5)	52 (25.1)		207
26-35	2.85	8 (4.1)	75 (38.7)	83 (42.8)	24 (12.4)	4 (2.1)		194
36-45	3.49	1 (1.0)	28 (27.2)	53 (51.5)	20 (19.4)		1(1.0)	103
46-97	3.77	2 (2.9)	14 (20.3)	24 (34.8)	22 (31.9)		7 (10.1)	69

Table : 3.20 Location of work place for women

Location of work place	**No of Women**
Retired, unemp,student, In own home, housewife	509 (49.1)
On road, place to place	23 (2.2)
Small establishment	44 (4.2)
large estb, Govt concern	21 (2.0)
Not applicable	438 (42.3)
No response	1 (0.1)
Total	1036 (100)

Table : 3.21 Type of work done by women

Type of work done	Number of Women	
Unskilled manual labour	20	(1.9)
Semi skilled manual labour	11	(1.1)
Tiny sector hawker	5	(.5)
Tiny sector manufacturer	13	(1.3)
Skilled worker	25	(2.4)
Small retailer	2	(.2)
Peon, waiter, ward boy level	4	(.4)
Secretarial level service	13	(1.3)
Nurse, teacher, compounder	17	(1.6)
Highly qualified professional	1	(.1)
Housewife	459	(44.3)
Student	301	(29.1)
Unemployed	24	(2.3)
Not applicable	137	(13.2)
No response	4	(.4)
Total	1036	(100)

Table : 3.22 Educational level of individual by Occupational level of adult women
(Figures are in %)

	Occupational level				
Educational level of individual	**Non workers & housewives**	**unskilled & semi skilled workers**	**skilled & service sector workers**	**Lower level professionals**	**Professionals and business person**
	Row	Row	Row	Row	Row
illiterate & primary	83.1	6.2	10.5		.2
secondary	65.0	4.7	28.4	.3	1.6
matriculation	38.3	5.1	46.4	3.0	7.2
higher secondary	38.7	3.6	45.0	4.5	8.1
undergrad., tech. and postgrad	37.4	1.1	24.2	14.3	23.1

Total women (N= 573)

CHAPTER IV

Morbidity

Pattern of Morbidity

The patterns of reporting of morbidity reveals important facets not merely to the health status of various groups, but also points to inequalities in status and autonomy among various groups of individuals. Morbidity and mortality data have long been used to estimate the level of gender injustice in society. Greater gender justice in the distribution of food, health care and other resources help in ensuring the survival and health of women and female children. Although less clearly understood, women's work autonomy in making reproductive choices and their relative status in the family and community also has an influence on their health. Morbidity among women is thus an important guide to understand their position in the household and the community. Health defined broadly as a feeling of physical, mental and spiritual 'well being' is often juxtaposed to its definition as absence of disease and infirmity. However, in actual reality, the relationship between 'well being' and absence of disease is very complex. People's perception of their health, illness and causative factors is based on many factors- social, economic, cultural and environmental. From a strictly scientific point of view, one may assume that those who live in poverty, degraded living environment, are involved in occupations which are hazardous to health etc. should necessarily have a lower feeling of well being and thus complain more of ill health and illness. However, studies have shown that this not necessarily so- the rich and well placed strata complained of illness more often than the poorer strata (Duggal & Amin, 1989) or that people in the underdeveloped states in India reported less morbidity than those in the developed states (NSS; 1992)

There are no straightforward explanations to explain the process by which an individual's social position is reflected in his/her health status. Even our bodily experiences are coloured by our perception of our social role and the definition of that state in our culture. Thus, a state which can clinically be defined, as 'illness' may not be experienced so by the woman by whom it may be as natural, part of being of a woman. Conversely, a clinician may refuse to accept a complaint made by her because it can not be medically established. However, unless we are prepared to accept and observe both these categories of problems, that part of women's morbidity will not emerge. It is a case of not seeing what we were not prepared to observe in the first place. Therefore, any investigation into health of people necessarily encounters the problem of understanding how health and illnesses are perceived and understood by people. A strictly medical approach to identify diseases among people, and a strictly sociological approach of accepting non-prompted answers given by people on their health and illness would not provide necessary answers. For instance, a number of studies done in last one decade on women's reproductive health have found that while there is a less reporting of reproductive illnesses by women in surveys, on clinical examination a very large number of them were found suffering from diseases (BCC et al).

Morbidity in health surveys

As knowledge from more studies accumulates, our understanding of the inter linkages of socio-economic, political and environmental factors with health is deepened. Notably, in the past decade, three attempts have been made to conduct country wide studies by the NSS

(1986-87) and NCAER (1990, 1993) to study morbidity, health care utilization and expenditure through the use of household surveys. Apart from these, numerous small scale studies have been conducted using the same methodology, the most significant among those include studies conducted in Jalgaon (FRCH, 1986-87), Madhya Pradesh (FRCH, 1994) and Kerala (KSSP, 1987).

These health surveys all recorded 'perceived morbidity' They depend on the person's perception of his/her health state. Perceived morbidity refers to the reporting of episodes of illness occurring in the span of a specified time period (recall period) by the respondent him/herself. There may be a criterion for identifying an illness episode such as restriction of physical activity, confinement to bed etc. A list of tracer conditions / probes (list of symptoms) may also be used to improve the reporting of minor ailments. Added to the heterogeneity of the studies conducted, there was no standardization in the methodology of these studies. Thus, a brief review of their findings indicate certain consistent trends as well as striking differences. The most remarkable difference has been in the quantum of morbidity that these studies have been able to record. In 1990, the NCAER (1992) recorded a prevalence rate of 67.70 illness episodes (formally treated) per 1000 persons for 15 day period in urban areas. This was marginally lower than the rural rate of 79.06. In 1993, in a similar study (Sundari, 1995) recorded a prevalence rate of 103 episodes (including untreated illnesses) per month in urban areas. In the study (Duggal & Amin; 1989) conducted in Jalgaon by FRCH, which was one of the first studies of this kind, they recorded a total monthly prevalence rate of 149. The rates for males and females were 145 and 152 respectively. In the study of two districts in Madhya Pradesh conducted by the same organization (George et al; 1994), the monthly morbidity rates was 323 for males and 296 for females. The total morbidity prevalence rate was 311. In the study conducted by KSSP in rural Kerala (Kannan K.P; 1991), unusually high morbidity rates were recorded with male morbidity being 203 and female morbidity 206 per thousand for a reference period of 2 weeks.

Although the rates of morbidity themselves vary significantly, the gender difference in the reporting of morbidity in each case is very marginal. The female morbidity rates are higher by 1 to 5 per cent than the total morbidity rates in the Jalgaon, KSSP and NCAER (1993) study. We find female morbidity lower than the total by 5 % in the Madhya Pradesh study. We do find that female morbidity is lower by 20 percent in the NCAER study of 1990. However, as this study took into consideration only formally treated illnesses, this finding is not surprising. It is very likely that a large percentage of women's illnesses go untreated. Both the NCAER studies as well as the Madhya Pradesh study which reported morbidity by age and sex showed that morbidity among adult women tended to be higher than morbidity for female children. This indicated that women faced a higher risk of illness after they reached the reproductive age. *However, no study had attempted to systematically document the nature of the additional illnesses suffered by women after they reached puberty through a household level survey.* Evidently, an important aspect of women's health is the strain put on women's bodies by actual reproduction and the resultant short term and life long health problems. However, studies on sexual or maternal health are not sufficient to understand how women's health condition changes after they enter into marriage and motherhood. These do not imply merely the responsibility of meeting the partner's sexual needs and the biological reproduction of children. Regardless of the other economic roles that they may perform, women in all societies undertake the responsibility of 'reproductive labour'. We must define it as a "work relationship' (Harvey; 1990, pg. 5) into which women enter as wives and mothers. Women

must undertake all the tasks that are necessary for the sustenance of their households. How burdensome this role becomes depends on many factors, including the resources available to the household, the expected number of children she must bear and raise, the number of dependents and the sexual and age-wise division of work within the household. In general, as reproductive labour is seldom transferred to male members of the household, adult women in the household are often the sole members of the family to undertake this 'reproductive labour' (See Chant; 1992). We attempted to use the household survey to explore the totality of women's health problems in relation to their lives and all aspects of their work.

Classification of illness

This survey in Mumbai city was in many ways a pre-testing or pilot study preceding the main and larger survey on women's health in Nashik district. As explained earlier, we modified the morbidity survey methods hitherto used by researchers in order to capture a part of those illnesses suffered by women but normally not reported in the household surveys for various reasons. The investigators in the present study recorded the verbatim response of the women interviewed. These verbatim responses, in the section covering morbidity, provided us with list of symptoms suffered in the month of June 1996. Our investigators had recorded each response to the probe as an independent episode of illness. This way, on one hand more morbidity was reported among women as compared to men in the household, and on the other hand, we had over-estimation of women's morbidity as some of the morbidity reported in response to probes were running concurrent and were a part of the symptom complex. **Table 4.1** throws light on this.

The resultant data on morbidity was then analyzed and a maximum of 3 symptoms was coded for each episode from a list of 89 symptoms. The classification of the episodes into 8 types of illness was then done taking into consideration all 3 symptoms. In case of doubt, the individual's gender and age as well as the stated reason for illness was taken into account. Although the types of illness were based broadly on the physiological systems (respiratory, gastrointestinal tract (GIT), reproductive system), we felt compelled to include categories such as 'aches, pain and injuries' and 'weakness' in the list. The final classification itself gives evidence to the distinctive character of women's health problems. The reporting of symptoms confirmed that women consider these health problems as important and as categories in themselves. Adhering to a strictly clinical classification of morbidity would have meant losing sight of this perception.

Prevalence

In the study, we recorded 780 episodes of illness among 2149 individuals in the month of June. Thus, the monthly prevalence rate of illness is 363 per thousand.**(Table: 6 4.5)** However, we find very dramatic gender differences in this study. We find that when asked to report illness without any probing, women have reported nearly twice as many episodes of illness for themselves as for the male population. (Males recorded a monthly prevalence rate of 169 per thousand as compared to 297 for females). 47 per cent of the episodes recorded for women (including girls below 12 years) were reported after probing. When we add the episodes reported after probing, the female morbidity rate becomes three and a half times as high (571 per thousand for females). No previous household study (where, usually, the gender of the respondent and the interviewer is not specified) has reported such a large difference in morbidity. **(Note**: Morbidity rate in this study refers to the number of episodes

reported for 1000 persons in the month of June 96 Monthly prevalence rate, rate of illness have been used alternatively for morbidity rate)

Morbidity by type of illness

The high morbidity rates among women are complemented by the high prevalence of specific types of illnesses.(**Table: 4.2**) Reproductive illnesses form the largest group of problems accounting for 28.2 % of all episode among females. We find that 127 of the 167 reproductive episodes reported by women were related to menstruation and child bearing (Menstrual problems, uterine prolapse, low back ache and lower abdomen pain). Reproductive health problems of the above nature are often linked to nutritional deficiency problems, which are also manifested as weakness. Pain of the extremities which is indicative of poor nutrition accounted for 36 of the 74 episodes related to aches, pain and injuries reported by women. Also taken together reproductive problems, aches, pains and injuries and weakness all of that are inter-related, form 51.69% of all illnesses reported among women. Thus, we see that these three types of illnesses form a complex of gender related health problems.

When we consider the gender difference in the type of illness reported without probing, we find significant differences in the level of morbidity in every category among men and women. **(Table: 4.3)** Women have reported remarkably higher levels of almost all types of illnesses. In only one category aches, pains and injuries, we find that the gender differences is not significant. When combined with the information received after probing the co-relation between gender and morbidity increases even further.

As anticipated, the high reporting of reproductive and related morbidity was achieved largely through the use of the probe list. (**Table: 4.4**) For e.g. only 37 of the 167 episodes of reproductive health problems were reported without probing. For the three 'gender related categories that we have identified, 75 % of the episodes were reported with probing. In contrast, not surprisingly, for the categories of respiratory illness, G.I.T tract problems and fevers, probing did not result in a significant increase in reporting. But we find that women reported significantly more episodes in these categories as well. Thus, the finding that women reported these types of illnesses much more frequently than men are very significant. This suggests that being female increases not merely the risk of reproductive and related morbidity, but also the likelihood of suffering from general health problems.

Morbidity by socio economic differences

Age : We find that in each and every age group, including children below 5 years, female morbidity is higher than male morbidity. In addition to this, we find that the gap between male and female morbidity increases with every age group. While female morbidity is 6 % higher in children below 5 years, it is 264 % higher among females above 45 years in age (excluding episodes recorded after probing). Likewise, we also find a wide variation in the distribution of illness among the different age groups in males and females. Among the males, predictably, we find morbidity to be highest among the under 5 population (361 per thousand). It steadily declines among the older males before rising among men between 36 and 45 years (188 per thousand). **(Table 4.5)** Among the eldest age group, it declines marginally to 160 per thousand. As women are the main respondents in this study, it is very likely that child morbidity has been better recorded, while the illness of adult males has been

under-reported. If we make allowance for these reporting errors, we are likely to see the characteristic "U" shape curve in male morbidity. This means that morbidity at both ends of the life span is high.

For the female population, we see an entirely different pattern emerging. We see a steady rise in the morbidity rates with age. We find that the morbidity rates among female children are relatively much lower than those among adult women. It can also be observed that the rates *continue to rise* till the women reach the age of 45 years, after which they decline to a small extent. Excluding data gathered through the use of the probe list does not radically alter this pattern because we find that women in and beyond the reproductive age, who report the largest number of illnesses with probing had already reported very high morbidity initially. The high morbidity among women in the reproductive age, which was earlier only hinted at, is revealed very clearly in this study.

Martial status : To complement the evidence from the age wise analysis of morbidity, we also see the contribution of reproductive labour in the rates of morbidity reported by ever married and never married women. Cohabiting women reported a morbidity rate of 850 and other ever married women a rate of 818 **(Table 4.5).** This is in sharp contrast to the rate of 290 for never married women. Although we did not record the obstetric history of the women respondents, we recorded the number of living children for all ever married women. We also find a positive link between the number of living children and female morbidity. The morbidity rate for married women with no children is 625, while for those with 3-4 living children it is 939.

Occupation & Earning status : The effect of economic labour is also very apparent in the data on female morbidity. As the numbers of employed women were very small, it is not feasible to analyze morbidity in the context of the type of work done. However, even when we consider merely the work status of women, we find a strong co-relation between labour and morbidity. In the total female population, non earners (students, & non employed girls below 12 years) have the lowest morbidity rates (230) **(Table 4.5)**. Housewives recorded a morbidity of 810, while those women who also earned an income had a morbidity rate of 774. However, when we consider women from the same living environment (slum, non slum), **(Table: 4.6)** we find that women who are employed have higher rates of morbidity than housewives in the same environment. Nuclear families with only one adult woman in every household is the most common family organization to be observed in the city. As there is no distribution of housework between men and women, that one woman must bear the entire responsibility for running the house. When such a woman seeks employment either by working at home or outside, the strain of paid work is merely added on to her existing workload. We find that among women living in slum as well as non slum households, employed women have higher morbidity rates than housewives in the same group. Thus, the additional burden of earning an income tends to increase the risk of morbidity for all women.

The difference in the morbidity rates of women having the same work status living in a different environment is much more significant than the difference in the morbidity rates of housewives and earners in the same environment. Even as housewives, who technically speaking, perform the same role in all households, women living in slums are put to a much greater risk of illness than employed women who live in a better home environment. When these same women take up employment, our data suggests that their health deteriorates even further.

Morbidity by physical environment

In Chapter III, we have given detailed information on the classification of the households into slum and non slum basically to understand the impact of environment on health. The findings reveal that (**Table: 4.6**) living in a slum adversely affects the health of all individuals regardless of gender, age and work status. The morbidity rates of slum dwellers of all age groups are more than double those of their counterparts in non slum households. The only exception being males in the age group of 12-17 and 26-35 years. We also find the same difference in the morbidity rates of both males and females, non workers and employed persons. The overall morbidity rates for slum dwellers were recorded as 429, as compared to 272 for non slum dwellers. Remarkably the effect of this variable (living environment) is to increase the quantum of morbidity for each group. The co-relation of morbidity with age, gender, marital status and work status is maintained within the same living environment. Thus, while the morbidity rates for housewives in the slum is as high as 971 (compared to 583 among non slum housewives), it is even higher for earning women at 980. Likewise, non slum earning women have a higher morbidity of 613, compared to housewives in the same living environment.

The analysis of morbidity in relation to the living environment shows the high degree of variation existing within groups defined according to work status, gender and marital status regardless of their living environment. Although the non slum population comprises 42% of the sample, their illness accounts for only 31.79% of the total morbidity.(**Table: 4.7**) Surprisingly, there is no significant variation in the morbidity pattern across the various categories of illness. In most cases the variation is very marginal. It would seem logical to assume that diseases which have an associations with pollution and lack of hygiene would be more dominant in slum environment in comparison to other illnesses. On the contrary, we find that respiratory illness, GIT tract infections and fevers form almost exactly the same proportion of total morbidity in both the slum and non slum populations.

We find that slum dwellers suffer more frequently from all types of illnesses. Overall, morbidity among the slum population is 10 % higher than among the total population. However, this increase is uniformly distributed across all the types of illnesses. In all categories of illness, apart from 'others', the share of the morbidity of slum dwellers is higher by 10 to 16 % than their share in the total population. In the categories of 'aches, pain and injuries' the disparity is less significant (4 %). The category of 'other' problems which includes a wide range of non infectious, chronic health problems has been reported as often by slum and non slum dwellers. Overall, it is a relatively minor group of health problems. This finding suggests that living in a degraded environment contribute in a general increase in ill health, rather than merely a rise in the incidence of specific diseases.

An analysis of the morbidity of women living in the slum shows that the morbidity rates among married women is 1026. This implies that more that an episode was reported on average by every woman in this category. Among the ever married women, those with 1-4 children reported equally high rates. Housewives and earning women both reported similarly high morbidity. Similarly high rates can be observed, when we look at the age wise morbidity, among women in the age group of 18-45 years.

When taken together, we find that married cohabiting women with children in the reproductive age who live in a slum environment are the most vulnerable to ill health. One of the obvious explanations for this high morbidity in slums is the degradation of the physical environment. Although the overall condition of the air, water and land in this area is very poor, the effects of those are exacerbated by the congestion and hygiene in the slums. Slum dwellers are brought more often into contact with toxins in the air, water and soil due to the open sewers, unpaved lanes, impermanent house structures, and the use of common toilets and water taps.

Apart from the general hardships of living in an area with a degraded environment and the lack of space, light and fresh air, women in slum areas also suffer from many other disadvantages. As noted earlier, reproductive labour for women constitutes a crucial aspect of their work lives. The slum household as a workplace is understaffed, over utilized and deprived of the most basic facilities. We found that among non slum households, water from even common taps could be drawn directly through plastic pipes. In the slums, due to the longer distance and greater number of users of taps, water had to be carried home in large vessels. The open drains in the slums were invariably clogged with solid waste thrown into them and had to be frequently cleaned by the women themselves. Due to the long queues at the municipal toilets, small children were made to defecate outside the house and the women were naturally responsible for cleaning the place after that. In the absence of specified area for garbage disposal, women had to be vigilant against the dumping of waste near their houses by others. As the lanes were not paved, the house was surrounded entirely by dirt and sludge. the women fought a constant battle to keep these out of their houses. The environment of the slum makes it necessary for women to undertake a heavy burden of work merely to make the house livable.

Employed women in slums were either home based workers or worked in the small industrial units close by. Thus, they were exposed to an additional degraded environment through their paid work. They also faced a heavier work burden because employment does not free women from the responsibility of housework. Thus, we find that they suffer from the highest level of morbidity.

This finding have a very important implication for the understanding of urban health problems. The high morbidity among slum dwellers, especially women, impresses on us. the need to study 'slum' not merely as a physical environment, but also to examine the social, economic and even psychological pressures that these communities and their women face. Our field experience made it very evident that destitution was not a widespread problem, even among the slum households. We found that, by and large, the households did not face any threats to survival. The income of all the households seemed adequate to fulfill the basic needs of food, clothing and shelter. What the slum households did experience was relative poverty. As they form the margin of a highly developed and relatively prosperous urban economy. In the Indian context, the effect that relative poverty has on both the perception of illness and actual morbidity has never been explored.

Table: 4.1 : Symptoms per episode reported

No. of Symptoms	No. of Episodes Reported					Total
	One	Two	Three	Four	Five	
Males						
One	79 (49.4)	15 (53 6)	0	0	0	94 (50 0)
Two	54 (33.8)	9 (32.1)	0	0	0	63 (33 5)
Three	27 (16.8)	4 (14.3)	0	0	0	31 (16 5)
Total Episodes	**160 (100)**	**28 (100)**	**0**	**0**	**0**	**188 (100)**
Total Symptoms	**268 (85.6)**	**45 (14.4)**	**0**	**0**	**0**	**313 (100)**
Symptoms per episode	**1.68**	**1.61**	**0**	**0**	**0**	**1.67**
Females						
One	146 (56.8)	144 (72.7)	69 (76.7)	24 (75.0)	11 (73 3)	394 (66 6)
Two	70 (27.2))	42 ((21.2)	12 (13.3)	6 (18.8)	3 (20 0)	133 (22 4)
Three	41 (16.0)	12 (6.1)	9 (10.0)	2 (6.2)	1 (6 7)	55 (11 0)
Total Episodes	**257 (100)**	**198 (100)**	**90 (100)**	**32 (100)**	**15 (100)**	**592 (100)**
Total Symptoms	**409 (47.8)**	**264 (30.9)**	**120 (14.0)**	**42 (4.9)**	**20 (2.3)**	**855 (100)**
Symptoms per episodes	**1.59**	**1.33**	**1.33**	**1.31**	**1.33**	**1.44**

The table shows that number of symptoms per episode of illness reported by women (1.44) is much lower than those by males (1.67). This is simply because single symptom episodes are remarkably higher among women than among women. The effect of probes used is therefore clearly visible.

Table: 4.2 : Type of illness by sex

Type of illness	No. of episodes and %ages		
	Male	**Female**	**Total**
Reproductive problems	-	167 (28.2)	167 (21.4)
Aches, pains and injuries	24 (12.8)	74 (12.5)	98 (12.6)
Weakness	4 (02.1)	65 (11.0)	69 (08.9)
Fevers	40 (21.3)	67 (11.3)	107 (13.7)
Respir. Probs.	85 (45.2)	115 (19.4)	200 (25.6)
G.I.T probs.	23 (12.2)	44 (07.4)	67 (08.6)
Probs. Of sense organs	5 (02.7)	31 (05.2)	36 (04.6)
Others*	7 (03.7)	29 (04.9)	36 (04.6)
Total	188 (100)	592 (100)	780 (100)

***Note: "Others"** include Mental stress, anxiety, piles, bladder stone, kidney problems, involuntary urination, diabetes, hair loss, Heart problems, blood pressure, paralysis, tumour and unspecified symptoms.

Table: 4.3 : Number of persons reporting various types of illness by sex (figures for women are with and without probing)

Type of illness	Males	Females			
	(Number)	Without probe (Number)	Chi Sq. sig	Total (Number)	Chi Sq. sig
Reproductive problems	0	34	.00000	144	.00000
Aches, pain and injuries	23	27	.406	72	.00000
Weakness	2	13	.00278	62	.00000
Fever	39	60	.01148	66	.00207
Respiratory problems	84	105	.03429	114	.00563
G.I tract problems	23	35	.06076	44	.00366
Skin, eye, ear problems	5	16	.00991	29	.00007
Others	7	15	.0594	29	.00009
Total reporting illness	**174**	**263**		**397**	
N=	**1113**			**1036**	

* Total number of persons=2149

Table: 4.4 : Effect of Probe on types of Illnesses reported

Type of illness	Number of episodes reported by women			
	Without probing	With probing	Not Applic.	Total
Reproductive problems	36 (21.6)	130 (77.8)	1	167
Ache, pain, injury	21 (28.4)	47 (63.5)	6	74
Weakness	12 (18.5)	52 (80.0)	1	65
Fevers	47 (70.2)	7 (10.5)	13	67
Respiratory problems	58	9 (7.8)	48	115
Gastro-Intestinal probs	22	9 (20.5)	13	44
Eye, ear, skin probs	16	13 (41.9)	2	31
Others	14	14 (48.3)	1	29
Total	**226 (38.2)**	**281 (47.5)**	**85 (14.3)**	**592 (100)**

Table 4.5 : Morbidity prevalence rates

Characteristics	Morbidity prevalence rates (per month/1000 individuals)				
	Sex		Living environment		All individuals
	Females	Males	Slum	Non-slum	
All (N=2149)	**571**	**169**	**429**	**272**	**363**
AGE					
0-4 Years	384	361	429	238	373
5-11 Years	222	171	230	147	197
12-17 Years	315	143	289	156	226
18-25 Years	686	130	510	232	408
26-35 Years	866	101	550	348	469
36- 45 Years	874	188	509	479	494
> 45 years	783	160	548	336	414
No response	667	000	333	000	154
EDUCATION					
Illiterate	832	191	658	453	610
Primary	418	172	363	179	297
Secondary/High-school	591	131	396	286	347
Matriculate	769	102	306	333	323
College & others	357	144	250	207	218
Not applicable	404	346	423	250	376
No response	500	200	200	500	250
HOUSEHOLD SIZE: (MEAN = 5)					
1-4 persons (3.3)	743	207	588	319	467
5-7 persons (5.7)	539	156	384	267	337
8-10 persons (8.6)	361	136	276	223	254
>10 persons (11.8)	556	188	667	143	356
MARITAL STATUS					
Not-married/cohabiting	290	195	289	168	238
Married/cohabiting	850	127	561	372	481
Widow/separated/divorced	818	625	944	593	794
Not applicable\No response	500	500	667	000	500
LIVING CHILDREN: (MEAN-1.4)					
Nil (0.0)	652	-	236	134	194
1-2 (1.5)	820	-	992	550	791
3-4 (3.4)	939	-	1100	709	919
>4 (6.1)	882	-	741	846	775
Not applicable	285	-	286	166	236
No response	714	-	2000	143	556
EARNING STATUS					
Housework	810	-	971	583	810
Non-earner	230	171	241	151	198
Earner	774	127	249	219	236
Not applicable/No response	404	291	387	226	341
TYPE OF OCCUPATION					
Student	223	171	228	162	196
Unemployed	417	169	326	108	236
Housework	811	-	974	579	811
Unskilled & Hawker	750	96	338	263	312
Skilled & Service	877	144	228	247	235
Professional & Business	500	67	235	132	151
Not applicable	402	335	410	253	368
No response	500	143	214	111	174
LOCATION OF WORK					
Own Home	790	238	909	557	768
Place-to-place	1087	85	365	368	366
Small Establishment	705	140	194	210	200
Large Establisment/Govt	476	115	146	183	172
Not applicable	279	211	294	170	242
No response	2000	53	250	000	150

Note: Morbidity prevalence rate = (number of episodes / number of persons) x 1000
For all figures underlined, the sample size (N) is less than 30.

Table: 4.6 : Environment and morbidity prevalence rates

Sample Characteristics	Morbidity Prevalence Rates (per month per 1000 individuals)				
	All Individuals	Females		Males	
		Slum	Non-Slum	Slum	Non-Slum
ALL (N=2149)	**363**	**684**	**424**	**201**	**123**
AGE					
0-4 Years	373	400	349	458	108
5-11 Years	197	248	182	211	114
12-17 Years	226	468	161	137	150
18-25 Years	408	912	342	149	101
26-35 Years	469	1052	595	95	110
36- 45 Years	494	956	810	200	175
> 45 years	414	1042	644	237	123
No response	154	2000	000	000	000
EDUCATION					
Illiterate	610	905	608	209	125
Primary	297	526	239	204	111
Secondary/High-school	347	704	460	141	118
Matriculate	323	1313	629	73	125
College & others	218	1400	277	128	153
Not applicable	376	408	395	438	88
No response	250	000	1000	222	000
Household Size: (Mean 5)					
1-4 persons (3.3)	467	921	519	267	134
5-7 persons (5.7)	337	624	420	178	122
8-10 persons (8.6)	254	402	309	149	113
>10 persons (11.8)	356	1222	222	333	59
Marital Status					
Not-married/cohabiting	238	337	227	251	116
Married/cohabiting	481	1026	621	129	123
Widow/separated/divorced	794	1000	593	600	667
Not applicable/No response	500	1000	000	500	-
Living Children: (Mean- 1.4)					
Nil (0.0)	194	881	250	-	-
1-2 (1.5)	791	1000	589	-	-
3-4 (3.4)	919	1134	714	-	-
>4 (6.1)	775	886	875	-	-
Not applicable	236	333	223	-	-
No response	556	4000	167	-	-
Earning Status					
Housework	810	971	583		
Non-earner	198	291	167	200	136
Earner	236	980	613	139	111
Not applicable/No response	341	418	368	362	127
Type of Occupation					
Student	196	266	179	194	144
Unemployed	236	529	143	229	100
Housework	811	974	579	-	-
Unskilled & Hawker	312	818	643	122	41
Skilled & Service	235	1120	688	142	148
Professional & Business	151	1000	438	133	50
Not applicable	368	406	389	416	128
No response	174	1000	000	154	125
Location of Work					
Own Home	768	960	558	177	500
Place-to-place	366	1188	857	85	83
Small Establishment	200	765	667	152	121
Large Establisment/Govt	172	500	474	128	108
Not applicable	242	323	219	270	128
No response	150	2000	0	90	0

Note: Morbidity prevalence rate = (number of episodes / number of persons) x 1000
For all figures underlined, the sample size (N) is less than 30.

Table: 4.7 : Type of morbidity and living environment

Type of illness	Living environment						
	Slum			Non Slum			Total
	No of episodes	A	B	No of episodes	A	B	No of episodes
Reproductive problems	124	108	97	43	82	70	167
Aches, pains	61	91	57	37	120	41	98
Weakness	48	102	40	21	97	29	69
Fevers	73	100	62	34	101	45	107
Respiratory problems	137	100	116	63	100	84	200
Gastro-intestinal probs.	46	100	39	21	99	28	67
Probls of sense organs	27	110	21	9	79	15	36
Others *	18	73	21	18	159	15	36
Total	**534**		**453**	**246**		**328**	**780**

Note: :- Columns A indicate the variations in the pattern of morbidity for each living environment (mean=100). For example, 100 indicates that 'fevers' constitute the same proportion of morbidity in the slum population as in the total population.

:- Columns B indicate expected frequencies for each type of morbidity

:- Others include Mental stress, anxiety, piles, bladder stone, kidney problems, involuntary urination, diabetes, hair loss, Heart problems, blood pressure, paralysis, tumour and unspecified symptoms,

CHAPTER V

Utilisation of Health Services

One of the important indicators of health status is the health seeking behavior which is expressed in terms of utilization of health care services and the type of treatment available. Utilization of health services is a complex phenomenon which is affected by various factors such as perception about illness, severity of illness, need for health care, knowledge about health services, physical, economic and social accessibility of health care services, quality of care, socio-economic and political structures and the biases of the health care providers. Under utilization of health services is known to be more acute in the case of poor, disadvantaged sections of our society and is due to a wide and multi -faceted socio-cultural-economic chasm that exists between the users and providers of health services.

Health status of women is indicative of the overall status of women in a given society. Access to health care for a woman is both an effect of women's status in society as it is a cause of it. Gender inequality in socio- economic and political spheres is reflected in the field of health as well. In the case of utilization of health services these are manifested in different forms like ability to seek treatment, access to and utilization of adequate health services by women. Their early socialization of suffering in dignified silence, enduring much more than the men, maintaining an equilibrium in the household affects their perception of their own health needs. Moreover, women's perceptions of their health needs are ignored by the insensitive and culturally inappropriate health services. Heavy workloads at home and outside, make it difficult for them to take time out for their health needs. Subordinate status in the family also limits their autonomy in decision making as well as access to money to meet the costs of services and transportation. This leads to further distancing of health care services. Thus gender inequality affects women's utilization of adequate health services for achieving even the simple state of well being.

Utilization of health services in other studies

There have been several studies conducted focusing on utilisation of health services in India. These studies have used different methodologies and settings to examine the aspect of health seeking behavior. Some of the studies were conducted in the communities focussing on utilisation as part of larger studies which examined, morbidity, event related, utilisation and expenditures incurred among other aspects. Some of them examined utilisation with regard to particular health facilities and in some of the studies the focus was on utilisation of health services related to specific illness.

The studies which were conducted in the communities were mainly by NSSO, FRCH NCAER and KSSP (NSSO, 1992, Duggal & Amin, 1989, NCAER, 1990; 1993, Kannan K P et al, 1991; George et al, 1994). These studies covered morbidity, reproductive events, treatment and utilization of health services and expenditures by households in their representative samples. Aspects with regard to the general preference for formal / non formal, indigenous, private / public type of health institutions and services have been studied at length. In addition to the above mentioned studies there have been many other studies conducted which focussed on certain aspects of the utilization pattern. Some of the studies have examined factors such as socio- economic characteristics of respondents and looked into

the gender differential. (Talwar, et al, 1985, Das et al, 1982,, Miller, 1982) The gender difference has been examined with regard to the timing of treatment more closely (Kielmann, et al, 1983; Kynch & Sen, 1983). Physical, economic, social and cultural inaccessibility of health services for Indian women has also been recorded by a number of other studies (Chatterjee, 1989; Khan et al., 1983; Das Gupta, 1987 and Leslie and Rao, 1989, Ramalingaswami, 1989; Vishwanathan and Rohde, 1990; Nichter, 1989, and Jeffrey et al, 1989).

There have been studies conducted on non-illness reproductive events, like pregnancy, delivery, post natal care, child care, contraception and abortion. There is quite an extensive amount of research done on these aspects. Generally, the focus has been on quality of care, program policy, demographic impact and the unmet needs of women and only peripherally on utilization. Those stressing utilization have been concerned with preventive services of the public sector. To name a few major ones, (NSSO 42nd Round, Vaidyanathan, 1990; and Prabhakara G N et al, 1984) who have studied utilization for ante- natal care, delivery, post natal care, and immunization of children. The impact of maternal education on utilization of health services in India has been documented by (Krishnan, 1975). The pattern of utilization of health services in non -illness- reproductive events has also been studied by the general utilization-expenditure studies mentioned earlier.

There have been studies conducted, which are hospital based. (Khan et al, 1983 & Murthy, 1982) They show lower attendance at hospitals and high proportion of `no treatment' among women. Those who do receive treatment, depend mostly on self- care, home remedies and a variety of "traditional" medical care. In contrast men are more likely to receive "modern" medical care, including institutional care, and higher quality care. (Das et al, 1982; Miller, 1982 cited by Meera Chatterjee 1991, p.44)

The studies which examined health seeking behavior with respect to certain illness especially with regard to women's reproductive health are by SEARCH, BCC, CORT, CHETNA, & STREEHITKARINI as in Gittelsohn, 1994). However, their focus has been on understanding gynecological morbidity and women's perception of the same.

Some qualitative studies like Visaria, (1997), have looked at men's perception of the unmet reproductive health needs of women. One finds a few specifically urban based studies (ORG, 1990; Yesudian, 1988; Gill S.,1996) focusing on how health services in urban settings are utilized.

Utilization of Health Services in the Study

Mumbai is privileged to have a well developed infrastructure and a vast supply of medical & health care services. Health services are provided by the public and the private sector. The health services range from the super specialty tertiary level care hospital to the practitioners. The public health services are mainly provided by the state and municipal authorities in Mumbai. In addition the central government has its own dispensaries which are available only for their employees. Further there are Employees State Insurance Scheme health care services which include hospitals and dispensaries and are only cater to the organized sector employees. The various departments such as the ports, railways, defence etc. have their own health care services and hospitals catering to their employees. For the general people the Mumbai Municipal Corporation (BMC) provides the major care in the public sector. There

are 6 teaching hospitals (2 state government), 15 peripheral hospitals, 26 maternity homes, 159 dispensaries and 176 health posts run by the BMC. In the private sector, the CEHAT database records 1082 private hospitals/nursing homes in Mumbai city which are run by individuals, cooperatives, corporate bodies, companies, religious bodies, trusts and NGOs. Apart from this there is a large segment consisting of private practitioners, polyclinics, and dispensaries.

In our study we have defined utilization of health services in a manner which incorporates all health care services and facilities. `Utilization' is defined as all actions taken to access knowledge, facilities, items and services to ease, reduce, eliminate, or prevent illness or specific symptoms or to cater to their health needs. 'Health facility' is taken to mean any institution inside / outside home, formal / informal, paid / unpaid / subsidized, belonging to any recognized / unrecognized system of medicine. `Treatment of illness' includes advice' (leading to action), examination, diagnosis of illness, cure and care of illness, symptoms reported and other health needs. 'Non –treatment' is when an illness is reported within the recall period, and no action has been taken to alleviate the situation. In 'Services' we have included also those received in the form of self- care / self- medication, home remedy, and from any local health service provider. Our intention was to include the entire gamut of utilization of health care services in the community and to analyze without a bias in favor of formal health care services.

Like any other ward, Jari Mari area also has the advantage of well linked social and infrastructure facilities. We have separated out the male episodes from the female episodes, analysis of the section on utilization of health services also follows the same pattern. Out of the 780 episodes, only 67% episodes were treated. In terms of gender difference we find that 91% of the male illness episodes were treated as compared to females where only 60% of the episodes were treated **(Table 5.1).** The average health facilities utilized per treated episodes works out to 1.04 for males and 1.05 for females. The total number of visits during the recall period was 1187 which works out to 1.52 visit per illness episode and 2.2 per health facility (excluding home treatment where we have recorded nil visits). There were only 4 cases of hospitalization, the rest being OPD or non- hospitalized cases.

Utilisation by type of facility utilized : Private health facilities form more than 4/5ths of the total health facilities utilized (553). With private facilities covering 84%, public facilities fare very poorly with only about 10% utilisation. This is followed by about 6% utilization of home facilities and other health facilities. Even if we exclude pharmacists / chemists who are presently grouped under private facilities (about 1/10th), the difference in private and public health facility utilization is vast. Utilization of private sector facility is common for both men and women, but slightly lower for women (Table 5.2). Public sector health facility is utilized in only about 9 -10% of the cases for males and females. The only other difference is that more female episodes get treated at home around 6% than the males 2%.

When we categories broadly the health facilities by private and non-private (public, home and other health facilities) health facility, we find that more number of women utilize non-private facilities than men. About 87 % male episodes are treated at private and about 12% are treated elsewhere, whereas in the case of females about 82% of illness episodes are treated in private and 17% are treated at non-private facilities.

Comparison of other study finding with reference to urban areas we find a similar trend emerging as in out study. Urban area studies show the same trend in greater utilization of private facilities, about 73% in Calcutta, 68% in Indore and 51% in Bharuch (ORG , 1990) All India based studies conducted by NCAER also indicate that for all states except Himachal Pradesh, Assam, Orissa and Karnataka the utilization of private facilities is high Even in a state like Kerala which has a well developed public health infrastructure, there is a greater reliance on the private sector than public sector. (NCAER, 1992). Public sector service utilization in various studies, has ranged between 9% (Duggal et al.,) to 36% (NCAER, 1990). In Mumbai, the public health services are inevitably utilized by people living in distant / not contiguous localities. A recent study conducted in a public hospital in Central Mumbai has shown that about 17% of the total OPD users and 28% of the generic OPD users come from the suburbs. (Gill, 1996).

Health Facility Structure: Regarding the type of health facility structure sought by people, we find that only 10% are being treated in hospitals / nursing homes. Apparently, the gender factor does not seem to be a deciding one in terms of utilization of hospitals / nursing home facilities. Dispensary / clinic constitute more than 3/4th of the health facilities used by men (79%) and for women it is lower than that (74%) **(Table 5.3).** Women's use of structures like that of chemists/ pharmacists, home and `others' together, is close to double that of male utilization. This could be reflecting the fact that these structures are convenient to them in terms of time, their location is closer to home, they can be accessed even by someone else in lieu of the ill person and require less money. Most of all this practice is in keeping with their perception of what can be treated outside the formal structures. The other possibility could be that these are seen as stop gap arrangements till the time they can seek services from formal structures for their immediate health needs.

Type cum Structure of Health Facility: If we examine the combination of the type and structure of health facilities utilized, we find that more than 4/5ths of the total private health facilities are from the dispensary / clinic. On the other hand, in case of public health facilities utilized by people, the reverse is true **(Table 5.4).** The public hospital / nursing homes rather than dispensary / clinic / health posts are preferred. The private hospital / nursing homes are utilized by a very small section (2%) of our sample population. Among the total private facilities utilized about 1/10th are chemists / pharmacists.

Distance of the facilities : Distance to the health care facility, mode of transport taken to reach the facility and waiting time are crucial in understanding utilization. However, we have considered only physical distance of the health facility in terms of time taken to reach the health facility from one's place of residence. We find that about 2/3rd of the total facilities utilized are in close proximity requiring less than 10 minutes to reach, 78% of them being private health facilities **(Table 5.5).**

The public health facilities are generally spread out; less than $1/4^{th}$ are at a distance of 10 minutes and another 36 % are at a 1/2 hour distance. The rest of the public health facilities i.e.. 43% are at more than 1/2 hour distance. What comes through from our study is that inspite of Mumbai having more health facilities as compared to rural areas they are at a distance as compared to private health facilities which are nearby, although that is not the only reason.

Type of treatment received : Out of the total treated episodes we find that more than half. the treatment consisted of dispensed medicines (excluding injection). About one fourth received medicines including injections and another 5% take home remedies. The major differences in treatment of male and female episodes is that less percentage of injections (25% vis-à-vis 33% for males) and more percentage of home remedies (6% vis-à-vis 2% by males) are received by women **(Table 5.6).**

Utilization of home remedy found in other studies like Jalgaon and Madhya Pradesh is around 2% which is closer to that used by males in our study. The same two studies have shown a very high percentage of injectables, which has not emerged in our study. Our observation does not show less dependence on injections in this area. The only logical reason for it not being reflected in our data, is that some respondents have not specified injections while mentioning about dispensing medicines. Secondly, respondents have stated services received in the same way as the general practitioner charges fees, i.e. clubbing consultation and payment for medicines including injections together. For them it is difficult to separate out the two from each other.

Health Provider :Considering that the bulk of health facilities utilized are private in the clinic / dispensary setup, the provider of care in the facility could become an important deciding criteria in choosing a particular health facility. The doctor is sought in more than three fourths of the male and female illness episodes. The second most preferred provider is a paramedical person such as a chemist / compounder / nurse / multi purpose worker (9%) **(Table 5.7).**

The women treat their illness episodes in a varied manner although they too predominantly seek doctors. About 17% of the female episodes were treated by either the paramedics, self and other providers like health worker, mantriks, bhagats etc. In comparison, to 10% of the male episodes.

The recourse to self medication (indigenous / folk medicines) was found to be lesser and preference was to go in for using easily available drugs at the chemist, general stores, continuing with old prescriptions, using what other people use as medicines for similar problems etc. Only 4% of the treated episodes were treated by themselves, which is slightly lower than the NCAER study, (5.2%) in the urban areas. (NCAER, 1995,).

Morbidity and Utilization of health care services

Irrespective of the type of morbidity, private health facilities were generally preferred to public facilities. These findings are true for both men and women.

Illness episodes of males with regard to fevers and gastro-intestinal problems show slightly higher utilization of public health facilities than in other illness episodes. Health services at home are utilized to some extent in the case of aches/ pains/ injuries, respiratory problems. Episodes of weakness, eye/ear/skin and `other' illnesses are very small to be analyzed In the rest of the illness episodes we find that 60 -100% of illnesses were treated.

With regard to female episodes the trend is that fevers, respiratory and gastro- intestinal problems are most often treated, by more number of health facilities and that too by private facilities. In case of reproductive illnesses, where only 39% of the episodes are treated, about 70% of the total health facilities utilized are private **(Table 5.8).** Similarly with weakness,

where only 35% of the reported episodes are treated, 82% depend on treatment from private The main difference in utilization by women from that by males is that home treatment is found to be quite commonly used by women for all types of morbidity

While general illnesses are treated in ways that women think are appropriate at the time, reproductive illnesses due to their sensitive nature are either not treated or preferred to be treated first in the most inconspicuous manner at home. Only later, if there is not much impact of these home remedies, do they take recourse to formal health facilities. Although we have not found large number of home treatment cases among women, however, we feel that there could be a process of seeking formal treatment which was not possible to explore fully in the quantitative section but which is revealed in the qualitative data collected. This is reflected in other studies which show that woman first use home remedies, traditional healers, and finally move to allopathic treatment. Bang's study shows that only 7.8 % of the women had gone to the modern medical care system for treatment of gynecological problems. (Bang, 1994; Patel, 1994,)

Utilization by Socio-Economic differentials

Sex and Utilization : The gender differences are apparent from the number of treated episodes out of total reported episodes and type of treatment taken by each sub- population. Broadly, the differences among males and females are stated in **Table 5.9.** While 91% of male episodes were treated as compared to females which was only 60% of illness episodes. The utilization of private health facilities is slightly lower and that of home facilities is higher for women than men. The findings clearly reveal that there exists a strong gender bias in terms of utilisation of health facilities for treatment of the illnesses.

Age wise utilization : The findings reveal that the out of the treated episodes for males in all the age categories was around 90% but for females it shows a sharp fluctuation between 49% to 97%. The only equivalence in utilization between male and female is in the high number of treated illness episodes for children in the age- group of 0-11 years. Among females, the girl child receives the most attention in terms of treated episodes. But this happy picture does not continue further with the female adolescents. Unlike the male counterparts who have 89% of their illness treated, the female adolescents have only 60% of their illnesses treated. Thus a majority of the females in the age group of 12-45 years have slightly more than half of their illness episodes treated **(Table 5.10).** Even among them, women in the 26-35 years age group, have the lowest percentage of treated episodes (49%). Older women i.e. above 45 years do not receive as much health care attention as the men in the same age group. The utilization of home facilities among adult females is more or less in the 5-10 % range (above 18) and highest among the 18-25 age group of females. Men are privileged in terms of utilisation irrespective of the age they are in as compared to females who are not able to utilize health facilities as they grow older.

Slum and non-slum utilization : Analyzing utilization of health facilities according to the environment they live in we find that males in slums have a much higher percentage of treated episodes than the females. While males in non-slums have all their episodes treated, their female counterparts have only 69% of the episodes treated **(Table 5.11).** Men and women in slums use lesser private health facilities and more public health facilities than those in non-slums. This could be due to the paying capacity of the people in slum for private health care facilities. This is also clearly brought out in other studies that it is the people from the slums who use public facilities.

Marital status and Utilization : Never married males and females have a high percentage of treated episodes. The currently married men and women on the other hand are at the other end of the spectrum with less number of treated episodes. Among the men, widower and others like separated, divorced, living -in partners, have reported very few illness episodes **(Table 5.12).** Among the women, the widows and others fare as poorly as the currently married ones, if not more, indicating that there are similar pressures of household responsibilities dissuading them from getting their illnesses treated.

Earning status and Occupation by utilization : Among the males in the different earning status groups, we find that more than 80% of reported episodes are treated compared to women which does not go above 55%. The main earners in both male and female populations have lower percentages than the equal earners, supplementary earners and non- earners **(Table 5.13)**. The female equal earner and main earners utilize higher percentage of home facilities remedies than the other women including housewives.

We have found very few people belonging to the professional/ business/ enterprise category and have therefore deferred from analyzing their health seeking behavior. However, on the whole men belonging to any of the occupation category have higher percentage of treated episodes than their counterparts among the women. The non-workers among the male have 97% of episodes treated while the female non-workers have only 57% of the episodes treated. The unskilled male worker has 71% of treated episodes while the women unskilled workers have only 44% of their illness episodes treated. The male skilled workers have 88% of their illnesses treated while the female skilled workers have 60% of their illness episodes treated. The male and female unskilled workers have the lowest percentage of treated episodes. This clearly brings out the fact that utilisation of health facilities for females is not determined by her earning status and occupation.

Location of work : Hawking or working at different places does affect treatment seeking behavior for both the sexes. (although the number of episodes reported among males in this category is very small). They have the lowest percentage of treated illness episodes **(Table 5.14).** For women in this category as well as those working in small unit / shop / establishment taking treatment for illness episodes seems to be difficult thus leaving more than half of their illness episodes untreated. The few episodes that are treated are catered to by private facilities.

Education : Our study does not show any direct impact of education on health seeking behavior. The important thing is that irrespective of the educational status all the males treated about 86- 94% of their episodes **(Table 5.15).** On the other hand no matter how high the educational level of the women not more than 65% of their illness episodes are treated. (Except the women who have technical/ professional education, who have very few reported episodes).

We should review treated episodes and utilization by women on the whole, in the context of social accessibility. In more than one cluster we found that women did not go outside their houses, without the knowledge / permission of the rest of the family, or the head of the family. Given this cultural backdrop utilization of formal health care facilities is bound to be inhibited and dependent on the head of the household. Even in households with nuclear family there are other pressures weighing down on the woman. Since the burden of household

chores is carried mainly by the woman of the household, any time spent for health care means less time for household chores. Any friction with other demands of women's time for child care, fuel and water collection, economically productive activities affects women's use of formal health activities. Thus, she can access health care only if she has a support system to fall back upon or when she feels confident of depending on those support systems. She is reluctant to go to a health facility because there is no one to take care of her household chores, children and husband in her absence (brief as it may be).

No Treatment Taken

As mentioned in the earlier chapter females have reported higher number of episodes due to the use of probes, therefore we find a higher number of health facilities recorded but the number of female episodes who did not utilize any health facility or no treatment was sought is much higher. We think it is an important aspect of the findings of the present study that needs to be examined in more detail we therefore have analyzed it in-depth in the following section.

Analyzing utilization from gender and other socio- economic factors, one finds that gender and age provide the most definite indication of differences in utilization. The figure for no treatment among women is 4 times higher than that of men. The NCAER figure for 'no-treatment of 8% illness episodes corresponds with only the male population in our study (9%).

If we consider each socio-economic variable for analysis we find the following. Only 11% of the male illness episodes in slums were not treated, whereas males in non- slums did not leave any episodes untreated. Women in both slum and non- slum environment have about 30-45% of not treated episodes. The males between the age group of 36-45 years and 45+ years have the highest percentages of illness episodes not treated (21% & 25% respectively) **(Table 5.18).** However, this figure looks inconsequential in comparison to women. The percentage of non treated episodes for women above 12 years is around 45%. The women in the 26-35 years age group having the highest percentage of not treated episodes. The difference between non- treated episodes of ever married men (currently and others) and never married men ranges between 5% to 15% . In the case of women, the difference between ever married women and never married women is 18% to 47%.

The main earners in male and female populations suffer from higher percentage of no-treatment than the others. However, the percentage are much higher for women (52%) than men (15%) in the same category. The women in the different earning status have between 46 - 52% of their illness episodes not treated, while the percentage for men in different categories does not rise above 20%. The non- working males have 3% of illness episodes as 'not treated' as compared to 43 % of the illness episodes of female non- workers in the same category. It is interesting to note that the percentage of untreated episodes of female skilled workers (40%) is more or less like that of the female non- workers**(Table 5.18).**. If we consider only those who have reported substantial number of illness episodes, the highest percentage of non- treated episodes among males is 13% which is found among the males working in the small unit /enterprise. Women working in their own home, place to place, small unit/ enterprise do not treat almost half of their reported episodes.

The housewives formed a large chunk of our respondents. If we look at the no treatment of housewives we find that 46% of their illness episodes are not treated. This shows that the hidden, unrecognized burden of housework takes its toll leaving them with an additional encumbrance of untreated illness or delayed treatment (not treated at the time of reporting of illness). At the same time we find that women who have independent incomes are not very different from the housewives. The female skilled workers, the female earners (main, equal, supplementary) all have 40-52% of their illness episodes non treated**(Table 5.18).**. Since we have not found any direct impact of education on health seeking behavior we note that no matter how high the educational level of the women in the household, it does not necessarily lead to greater health seeking behavior. Excluding women who have technical / professional education (number of episodes are small) we find that whatever their educational status women do not treat about 35- 48% of their reported illnesses. The illiterate men have the highest percentage of `not treated' episodes (18%) among the male population. Evidently, higher education or the ability to earn an independent income has not enabled them to have any real control over their own or their family's income, greater time and decision making in their hands vis-à-vis health.

The reasons for `no treatment' found in our study are more or less similar to that found by NCAER (1995) study. The NCAER study which examined the `no- treatment' aspect, found that in 80% of untreated illnesses (urban areas) were due to the fact that they did not consider the illness to be serious enough for treatment. Lack of financial resources available for seeking health care was also an important reason. We find that people do not seek treatment when the illness is considered to be seasonal / temporary / not very disturbing, or even when they have chronic, long duration illnesses. Also, financial problems are a deterring factor in seeking treatment of illnesses. Reasons for no treatment vary between the two sexes. Among men, about 59% have stated that they did not seek treatment because the illness was seasonal, temporary or not very disturbing or when they were chronic episodes. Another 18% have stated that they have not treated illnesses because of lack of support system, leave and other facilities **(Table 5.16).** Financial reasons are the cause for non- treatment in only 12% of the illness episodes. On the other hand, 22% of women's illnesses are not treated dues to financial problems. About 43% of the women's `non treated episodes' are due to the perception that the illness is either seasonal, temporary or long drawn and 12% due to lack of social support system etc.

What becomes evident from the present study is that the `not treated illness episodes' bring out the real difference in utilization by males and females. When they seek treatment for illness episodes, there is no apparent difference in the kind of health facilities utilized. However, the low status of women in household setup and the society leads to a pattern of treatment which is subtly different from that of males. In the final analysis the prominent determining factor that emerges is the context in which men and women's role in the family and society is defined.

Table 5.1 : Number of episodes & number of health facilities used

Particulars	Males	Females	Total
No. of Episodes Treated	171 (91%)	355 (60%)	526 (68)
No. of Episodes not treated	17 (9%)	237 (40%)	254(32.5%)
Total episodes reported	188	592	780
Total H.F. used	178	375	553
Average H.F. utilised per treated episode	1.04	1.05	1.05

Note : H. F : Health facility

Table 5.2: - Type Of Health Facility

Type Of H F. Utilised	Number		
	Males (%)	Females (%)	Total (%)
Private	154 (87)	309 (82 4)	463 (84)
Government	16 (9.0)	37 (10)	53 (10)
Home	4 (2 2)	22 (6)	26 (5)
Any Other	1 (0.6)	5 (1.3)	6 (1 1)
NR/NA	3 (1.7)	2 (0.5)	5 (1)
Total	178 (100)	375 (100)	553 (100)

Table 5.3 : Structure Of Health Facility

Structure Of H.F. Utilised	Number		Total
	Males (%)	Females (%)	Total
Dispensary/Health Post	141(79.2)	276 (74)	417 (75.4)
Hospital/Nursing Home	18 (10.1)	36 (10)	54 (10)
Chemist/Pharmacy	12 (7)	38 (10.1)	50 (9.0)
Home	4 (2.2)	22 (6)	26 (5)
Any Other	0	1 (0.3)	1 (0.2)
NR/NA	3 (2)	2 (0.5)	5 (1.2)
Total	178	375	553

Table 5.4 : Type Of Health Facility And Its Structure

	Structure Of Health Facility						
Health Facility Type	Disp/HP %	Hospital / Nursing home	Chemist	Home	Any Other	NR/NA	Total
Private	405 (87)	9 (2)	49 (11)	0	0		463
Public	9 (17)	44 (83)	0	0	0		53
Home	0	0	0	26	0		26
Any other	3 (50)	1(16.7)	1(16.7)	0	1(16.7)		6
NR / NA						5	5
Total	417	54	50	26	1	5	553

Table : 5.5 :- Distance To Health Facility

Health Facility type	Distance					Total	
	No Distance	Less than 10min	10 to less than 1/2 hour	1/2 hour- less than 1hour	1hour & more	NR/NA	Total
Private		358 (77)	61 (13.2)	36 (7.7)	8 (1.7)		463
Govt		13 (23)	19 (33.9)	16 (28.6)	8 (14.3)		56
Home	26 (100)	0	0	0	0		26
Other		2 (33.3)	2 (33.3)	1(17)	1(17)		6
NR/NA						2	2
Total	26	373	82	53	17	2	553

Table : 5.6 :- Type Of Treatment Received (For Treated Episodes) *

Type Of Treatment	Number		
	Males (%)	Females %	Total
Dispensed Medicines	101 (59)	224 (63)	325 (61.7)
Dispensed medicines including / only Injection	57 (33.3)	89 (25)	146 (27.7)
Special care including investigations	9 (5.2)	20 (5.6)	29 (5.5)
Home remedy	(2.3)	22 (6.1)	26 (4.9)
Total	171 (100)	355 (100)	526(100)

Table : 5.7 Provider Of Health Care Services

Type Of Provider	Number of services		
	Males (%)	Females %	Total
Doctor (male and female)	157 (88.2)	309 (82.4)	466 (84.3)
Paramedic / Chemist / Nurse	11 (6.2)	39 (10.4)	50 (9)
Self	3 (1.6)	19 (5.1)	22 (4)
Any Other (incl more than 1 provider)	4 (2.2)	5 (1.3)	9 (2.4)
NR/NA	3 (2)	3 (0.8)	6 (1.1)
Total	178	375	553

Table 5.8 : Utilization of Health facilities according to Morbidity

Illness Type-	Private	Public.	Home	Others	HF Utilised	Treated epi. (% of ttl. Epi.)	Total Episodes	No treatment
MALES								
Reproductive illnes	0	0	0	0	0	0	0	0
Aches/Pain	18 (85 7)	2 (9 5)	1(4.7)	0	21 (100)	21 (87)	24	3 (12 5)
Weakness	1(100)	0	0	0	1 (100)	1 (25)	4	3 (75)
Fevers	37 (88.4)	4 (9.3)	0	1 (2.3)	42 (100)	40 (100)	40	0
Respiratory Prob.	73 (92.4)	4 (5.1)	2 (2.5)	0	79 (100)	77 (90.5)	85	8 (11 7)
Gastro-int Prob.	18 (86)	3 (14.3)	0	0	21 (100)	21 (91)	23	2 (8 6)
Eyes/Ears/ Prob.	2(50)	1(25)	1(25)	0	4	4 (80)	5	1 (20)
Others	5(71)	2(29)	0	0	7	7 (100)	7	0
NR/NA							0	
Total	154	16	4	1	175	171	188	17
FEMALES								
Reproductive illnes	45 (69)	8 (12.3)	10 (15.4)	2 (3.1)	65	65 (38.9)	167	102 (61)
Aches/Pain	33 (77)	3 ((7)	5 (12)	2(5)	43	41 (55.4)	74	33 (44 5)
Weakness	23(82)	4 (14.3)	1 (2.3)	0	28	23 (35)	65	42 (64 6)
Fevers	57 (96.6)	1((1.6)	1(1.6)	0	59	56 (83.5)	67	11 (16 4)
Respiratory Prob.	95(87.1)	13 (12)	1(1)	0	109	104 (90.4)	115	11 (9 5)
Gastro-int Prob.	33 (82.5)	4 (10)	3 (7.5)	0	40	39 (88.6)	44	5 (11.3)
Eyes/Ears/ Prob.	11 (69)	4 (25)	1 (6.3)	0	16	14 (45.1)	31	17 (54 8)
Others	12 (92.3)	0	0	1(8)	13	13 (44.8)	29	16 (55 1)
NR/NA					2			
Total	309	37	22	5	375	355	592	237
BOTH								
Reproductive illnes	45(69)	8(12.3)	10(15)	2 (3.1)	65 (100)	65 (39)	167	102 (61.1)
Aches/Pain	50(78)	5(7.8)	6(9.3)	2 (3.1)	64 (100)	62 (63)	98	36 (37)
Weakness	24 (82.7)	4(13.7)	1(3.4)	0	29 (100)	24 (35)	69	45 (65)
Fevers	94(93)	5(4.9)	1(0.9)	1 (0.9)	101 (100)	96- (90)	107	11 (10)
Respiratory Prob.	168(89.3)	17(9.04)	3(1.5)	0	188 (100)	181 (90.5)	200	19 (9.5)
Gastro-int Prob.	51(83.6)	7(11.4)	3(4.9)	0	61 (100)	60 (90)	67	7 (10.4)
Eyes/Ears/ Prob.	13(65)	5(25)	2(10)	0	20 (100)	18 (50)	36	18 (50)
Others	17(85)	2(10)	0	1(5)	20 (100)	20 (56)	36	16 (44)
NR/NA					5			
Total	463	53	26	6	553	526	780	254

Table : 5.9 : Sex & utilization of health facilities

SEX	Private	Public	Home	Others	NR	HF utilised	Episodes treated	Total episodes
Male	154(88)	16 (9 1)	4 (2.3)	1 (0.6)	3	178	171 (91)	188
Female	309 (82)	37 (9 8)	26 (6.9)	5 (1.3)	2	375	355 (60)	592
Total	463	53	30	6	5	553	526	780

Note : (Fgures in parenthisis are percentages of Total no of health facilities)

Table 5.10 - Age & Utilization Of Health facilities

Age	Private	Public	Home	Others	H F Utilized	Episodes Treated (% of ttl)	Total episodes
MALES							
0-11 yrs	69 (87.3)	8 (10.1)	1(1.2)	1 (1.2)	79	75 (93)	81
12-17yrs	16 (94.1)	1 (5.8)	0	0	17	17 (89)	19
18-25yrs	22 (88)	3 (12)	0	0	25	25 (93)	27
26-35	18 (94.7)	1 (5.2)	0	0	19	19 (90)	21
36-45	16 (80)	2 (10)	2 (10)	0	20	20 (83)	24
46-97	13 (86.6)	1 (6.6)	1 (6.6)	0	15	15 (94)	16
NR/NA					3		
Total	154	16	4	1	178	171	188
FEMALES							
0-11Yrs	79 (85.8)	10 (10.8)	2 (2.1)	1 (1.08)	92	87 (90)	97
12-17Yrs	24 (88.8)	3 (11.1)	0	0	27	24 (62)	39
18-25yrs	64 (7.2)	9 (10.8)	9 (10.8)	1 (1.2)	83	81 (57)	142
26-35Yrs	66 (79.5)	11 (13.2)	6 (7.2)	0	83	82 (49	168
36-45Yrs	43 (86)	3 (6)	3 (6)	1 (2)	50	46 (51)	90
46-97Yrs	33 (86.8)	1 (2.6)	2 (5.2)	2 (5.2)	38	34 (63)	54
NR/NA					2	1	2
Total	309	37	22	5	375	355	592

Table 5.11:-Slum and Non-slum utilization

Males	Private	Public	Home	Others	Total HF Utilized	No of epi. (% of ttl. epi.)	Total No. of episodes
Slum	122 (87.1)	15 (10.7)	3 (2.1)	0	140 (100)	136 (88.8)	153
Non-slum	32 (91.4)	1 (2.8)	1 (2.8)	1 (2.8)	35 (100)	35 (100)	35
NR/NA					3		
Total	154	16	4	1	178	171	188
Females							
Slum	239 (80.7)	34 (11.4)	19 (6.4)	4 (1.3)	296 (100)	280 (57.9)	483
Non slum	70 (90.9)	3 (3.8)	3 (3.8)	1 (1.2)	77 (100)	75 (68.8)	109
NR/NA					2		
Total	309	37	22	5	375	355	592

Table 5.12 :- Marital Status And Utilization

MARITAL STATUS	Private	Public	Home	Others	HF Utilised	No of epi. (% of ttl. epi.)	Total No. of episodes
MALES							
Currently married	45 (86.5)	4 (7.6)	3 (5.7)	0	52	52 (85)	61
Never married	104 (88.8)	11(9 4)	1 (0 8)	1 (0 8)	117	113 (94 1)	120
Others	5 (83.3)	1 (16.6)	0	0	6	6 (100)	7
NR/NA					3		
Total	154	16	4	1	178	171	188
FEMALES							
Currently Married	179 (82.8)	20 (9.2)	16 (7.4)	1 (0.4)	216	208 (53)	394
Never married	107 (85.6)	14 (11.2)	2 (1.6)	2 (1.6)	125	120 (82)	147
Others	23 (71.8)	3 (9.3)	4 (12.5)	2 (6.2)	32	27 (52.9)	51
NR/NA					2	3	
Total	309	37	22	5	375	355	592

Table 5.13:- Earner status and occupation by utilisation

Earning Status	Private	Public	Home	Others	HF Utilised	Episodes treated (% of ttl. Epi.)	Total episodes
Males							
Non earner	19 (79.1)	3 (12.5)	1 (4.1)	1 (4.1)	24	24 (92)	26
Main earner	37 (90)	2 (5)	2 (5)	0	41	41 (83)	48
Suppl. Earner	13 (76.4)	3 (17.6)	1 (5.8)	0	17	16 (94)	17
Equal earner	3 (100)	0	0	0	3	3 (100)	3
NR/NA	82	8	0	0	93	87	94
Total	154	16	4	1	178	171	188
Females							
Non Earner	15 (83.3)	2 (11.1)	1 (5.5)	0	18	14 (52)	27
Main Earner	7 (58.3)	2 (16.6)	2 (16.6)	1 (8.3)	12	11 (48)	23
Suppl. Earner	20 (76.9)	4 (15.3)	2 (7.6)	0	26	26 (54)	48
Equal Earner	7 (87.5)	0	1 (12.5)	0	8	7 (50)	14
House Wife	170 (82.5)	17 (8.2)	16 (7.7)	3 (1.4)	206	197 (54)	366
NR/NA	90	12		1	105	100	114
Total	309	37	22	5	375	355	592
Occupation Category							
Non wrkr & house Wife	59 (88.05)	5 (7.4)	2 (2.9)	1 (1.4)	67	65 (97)	67
Unskilled / semi Worker	5 (100)	0	0	0	5	5 (71)	7
Skilled worker	49 (89)	5 (9.09)	1 (1.8)	0	55	53 (88)	60
Prof. /busi. / entreprise	3 (75)	1 (25)	0	0	4	4 (100)	4
NR/NA	39	5	0	0	47	44	50
Total	154	16	4	1	178	171	188
Females							
Non wrkr/ house wife	229 (84.5)	22 (8.1)	17 (6.2)	3 (1.1)	271	258 (57 4)	449
Unskilled wrkr	9 (75)	0	3 (25)	0	12	12 (44)	27
Skilled worker	23 (76.6)	6 (20)	1 (3.3)	0	30	30 (60)	50
Prof. /busi / entreprise	4 (66.6)	0	1 (16.6)	1 (16.6)	6	6 (67)	9
NR/NA	44	9	0	1	56	49	54
TOTAL	309	37	22	5	375	355	592

Table 5.14:- Location of work and utilization

Location of work	Private	Public	Home	Others	HF Utilized	Episodes treated (% of ttl epi.)	Total episodes
Retired/ unemployed	53 (86.8)	6 (9.8)	2 (3.2)	0	61	58 (97)	60
Own Home/ Housewife	4 (66.6)	1 (16.6)	0	1(16.6)	6	6 (100)	6
Hawker	2 (100)	0	0	0	2	2 (40)	5
Small unit/ Est./ shop	30 (88)	3 (8.8)	1 (2.9)	0	34	33 (87)	38
Large unit/ Shop/govt.	10 (76.9)	2 (15.3)	1 (7.6)	0	13	13 (100)	13
Others	12 (100)	0	0	0	12	12	14
NR/NA	43	4	0	0	50	47	52
Total	154	16	4	1	178	171	188
Females							
Retired/ unemployed	52 (88)	5 (8.4)	2 (3.3)	0	59	55 (76.4)	72
Own home / housewife	183 (82.06)	19 (8.5)	18 (8.07)	3 (1.3)	223	213 (54.2)	393
Hawker/ place to place	8 (61.5)	3 (23.07)	1 (7.6)	1 (7.6)	13	13 (48.1)	27
Small unit/ Est./ shop	11 (91.6)	0	1 (8.3)	0	12	12 (48)	25
Large unit/ Shop/govt.	8 (88.8)	1 (11.1)	0	0	9	9 (75)	12
Others	1 (100)	0	0	0	1	1 (25)	4
NR/NA					58	52	59
Total	309	37	22	5	375	355	592

Table 5.15 :-Educational Status and Utilization

Educational status	Private	Public	Home	Others	H F Utilised	Episodes treated (% of total epi)	Total No. of Epi.
Males							
Illiterate	15 (78.9)	2 (10.5)	2 (10.5)	0	19	19 (86)	22
Primary	28 (90.3)	3 (9.6)	0	0	31	30 (94)	32
Second- High School	41 (91.1)	3 (6.6)	0	1 (2.2)	45	41 (93.2)	44
Passed Matric	14 (82.3)	3 (17.6)	0	0	17	15 (94)	16
Higher Second. / coll.	15 (100)	0	0	0	15	15 (88)	17
Technical Professional	1 (50)	0	1 (50)	0	2	2 (100)	2
Preschool / NR/NA	40 (81.6)	5 (10.2)	1 (2.04)	0	49	49	55
Total	154	16	4	1	178	171	188
Females							
Illiterate	78 (78.7)	9 (9.09)	9 (9.09)	3 (3.03)	99	92 (53 2)	173
Primary	52 (83.8)	7 (11.2)	3 (4.8)	0	62	59 (65)	91
Second High School	83 (86.4)	8 (8.3)	5 (5.2)	0	96	92 (52.3)	176
Passed Matric	29 (80.5)	3 (8.3)	3 (8.3)	1 (2.7)	36	36 (60)	60
Higher Second. / Coll.	12 (92.3)	0	1 (7.6)	0	13	12 (57.1)	21
Technical Professional	2 (66.6)	0	1 (33.3)	0	3	3 (75)	4
Preschool/ NR/NA	53	10	0	1	66	61	67
Total	309	37	22	5	375	355	592

TABLE 5.16 :- Reasons for No Treatment

Reason Stated	Not treated episodes		
	Males	Females	Total
Financial Reason	2 (12)	53 (22)	55 (22)
Illness seasonal/Temp/not very disturbing	9 (53)	54 (23)	63 (25)
Problem in access/ no leave/ support	3 (18)	24 (10)	27 (11)
Afraid/Shy/Painful treatment	2 (12)	36 (15)	38 (15)
Illness is chronic / longterm	1 (6)	48 (20)	49 (19)
Any Other	0	5 (2.1)	5 (2)
NR/NA	0	17 (7)	17 (7)
Total	17	237	254

Note . Figures in parenthisis are percentages of Total non treated epiosdes

TABLE 5.17 :-Gender & `No Treatment

SEX	No. of epi. without trt. (% of Total no. of epi.)	Total Episodes
Male	17 (9)	188
Female	237 (40)	592
TOTAL	254 (33)	780

Table 5.18 : Socio-Economic Differentials & no Treatment

Locality	No of Episodes without treatement (% of ttl. epi.)	Total Episodes
SEX		
Male	17	188
Female	237	592
MALES		
Slum	17 (11.1)	153
Non-slum	0	35
FEMALE		
Slum	203 (42)	483
Non-slum	34 (31.1)	109
AGE GROUP		
MALES		
0-11	6 (7.4)	81
12-17	2 (11)	19
18-25	2 (7.4)	27
26-35	2 (9.5)	21
36-45	4 (21)	24
46-97	1 (25)	16
FEMALES		
0-11Yrs	10 (10)	97
12-17Yrs	15 (39)	39
18-25Yrs	61 (43)	142
26-35Yrs	86 (51)	168
36-45Yrs	44 (49)	90
46-97Yrs	20 (37)	54
NR/NA	1	
MARITAL STATUS		
MALES		
Currently married	9 (15)	61
Never married	7 (5.8)	120
Others	1 (14.2)	7
FEMALES		
Currently Married	186 (47.2)	**394**
Never married	27 (18.4)	147
Others	24 (47.0)	51
EARNER STATUS		
MALES		
Non earner	2 (8)	26
MAin earner	7 (15)	48
Suppl. Earner	1 (6)	17
Equal earner	0	3
NR/NA	7	94
FEMALES		
Non Earner	13 (48.1)	**27**
Main Earner	12 (52)	23
Suppl Earner	22 (48)	48
Equal earner	7 (50)	14

Housewife	169 (46)	366
NR/NA	14 (12)	114
OCCUPATION TYPE		
MALES		
Non Worker & Housewife	2 (3)	67
Unskilled / semi Worker	2 (29)	7
Skilled worker	7 (12)	60
Profnal/ bus/entreprise	0	4
NR/NA	6	50
FEMALES		
Non worker/ Housewife	191 (43)	**499**
Unskilled worker	16 (59)	27
Skilled worker	20 (40)	50
Professional/ busiss/entr	3 (33.3)	9
NR/NA	7	57
LOCATION OF WORK		
MALES		
Retired/ unemployed	2 (3.3)	60
Own home/ housewife	0	6
Hawker/ place to place	3 (60)	5
Small unit/ est./shop.	5 (13.2)	38
Large unit/ shop/govt.	0	13
Others	1 (7)	14
NA/NR	6	52
FEMALES		
Retired/unemployed	17 (24)	72
Own home/ Housewife	180 (46)	393
Hawker/ place to place	14 (52)	27
Small unit/ est/ shop	13 (52)	25
Large unit/shop/govt.	3 (25)	12
Others	3 (75)	4
NR/NA	7	59
EDUCATIONAL STATUS		
MALES		
Illiterate	3 (18.2)	22
Primary	2 (6.3)	32
Second-High School	3 (7)	44
Passed Matric	1 (6.3)	16
Higher secondary	2 (12)	17
Technical ProfessioNal	0	2
preschool/ NR/NA	6	55
FEMALES		
Illiterate	81 (47)	173
Primary	32 (35.1)	91
Second-High School	84 (48)	176
Passed Matric	24 (40)	60
Higher secondary	9 (43)	21
Technical Professional	1 (25)	4
preschool/NR/NA	6	67

CHAPTER VI

Expenditure on Health

In this chapter we have analyzed the expenditure incurred by the households on the treatment of illness affecting their members. We have studied expenditure incurred on individuals, for the treatment of each episode or event and for each facility utilised where costs were involved. We have also examined various components of the cost incurred, differentials in expenditure related to utilisation of the health facilities and other factors.

Expenditure on health care is made by various sectors of the health care system. The major part of health care costs are incurred by the government and the households who spend on health care. The government allocates resources for health care at various levels namely, central, state and local bodies (municipalities & zilla parishads). Health is primarily the responsibility of the state government with family welfare being looked after by both the central and state governments. The major expenditure is made by the state governments, with the central government providing grants for the specific national programmes on a sharing basis. In addition to government expenditure, the various other departments such as defence, railways, mines etc also spend on health care. The health expenditure of the government is well documented in the Combined Finance and Revenue Accounts (CFRA) and the respective state budgets and annual budgets of the local bodies.

In Mumbai city, public expenditure is incurred mainly by the state government and municipal corporation. Health facilities ranging from health posts to tertiary care units (teaching hospitals) have been developed in Bombay city. Though the city is characterised by sharp contrasts, it has probably the best public health systems in the country. The total expenditure incurred by BMC on public health in 1997-98 was Rs. 3,808 millions. In addition, the state government spends another Rs. 1,050 millions in Mumbai city, amounting to a total expenditure of around Rs. 4,858 millions. With a population of 14 (1996 estimates) million persons, the per capita expenditure is Rs. 347 per person per year. In addition, the central government spends through its various health care services such as defense, railways etc.

There have been various studies conducted in the recent past on household spending on health care which show that the expenditure incurred by households is nearly 4 to 5 times higher than what the government is spending on health care. Some of the organizations which have conducted the studies spearding across the country are the National Sample Survey Organization and the National Council of Applied Economic Research, Foundation for research in Community Health in Jalgaon district, Maharashta and in two districts of Madhya Pradesh, Kerala Shastra Sahitya Parishad in rural Kerala among others.

In the present study expenditure on illness was recorded for a reference period of one month. The expenditure is incurred on acute illnesses, acute episodes of chronic illnesses and on going treatment of chronic problems, incurred in the last month. One of the major emphasis in the study was to apply a gender perspective to record the health problems, women's experiences and the gender differentials in health care spending pattern of the households.

Expenditure on Illness

The total expenditure incurred for treating illness in the sample population under study was Rs. 74,455. The cost per episode (for 780 episodes) was Rs. 95.45. The per capita expenditure for the one month reference period amounted to Rs. 34.64 which means an annual per capita expenditure of Rs. 415.68 (which is about 20% more than the health expenditure by public authorities). This figure is also higher compared to other studies. In comparision with the study conducted in the two districts of Madhya Pradesh, where the per capita expenditure incurred was Rs. 299.16 per year for the total sample (rural and urban areas) and for urban areas was Rs. 308.88 (George, A, Shah, I. Nandraj, S., 1993). The high cost of per capita expenditure in the present study could be partially attributed to inflation and also to the fact that Bombay is a metropolitan city where the cost of living is generally higher.

As can be seen from **Table 6.1** more than half (Rs 46,256) out of the total expenditure of Rs. 74,455 was spent on females. Analysing annual per capita expenditure, we find that the expenditure on women is higher Rs. 538.90, as against Rs 301.08 for males. This could be due to various factors. The number of illness episodes recorded for females is 4 times higher than that of males. Out of a total episodes of 780 reported 592 episodes were for females. However, the expenditure incurred per episode for females is lower at Rs. 78.59 than the average expenditure on the total episodes which is Rs. 95.45. It is even lower in comparison with males Rs. 148.56. The per capita expenditure obscures the actual cost of health care as many of those who fell ill did not necessarily seek treatment, more so females. This is clearly brought out by the present study where we discovered of 592 illness episodes affecting females, for nearly half (237 episodes) they did not seek treatment as compared with only 17 (out of 188 episodes) untreated illness episodes for males. In these, for 145 male illness episodes for which expenditure was made, an average expenditure of Rs. 192.61 was incurred. In comparison, for 301 female illness episodes for which expenditure was made, there was an average expenditure of Rs. 154.57 **(Table 6.1).** This shows clearly that the average cost incurred per illness episodes for those who made some form of payment is much higher.

The high number of illness episodes among females in the present study could be attributed to the use of probes as mentioned earlier. The expenditure pattern reveal that in the 281 female illness episodes reported after probing, only Rs. 59.58 per episode were spent, as against 271 illness episodes reported without probing where on an average Rs. 111.72 per episode were spent **(Table 6.1).** In the present study the reporting of female illness is much higher as compared to other studies, but in terms of expenditure, the amount spent is very small for those who reported ill after probing. This clearly brings out the fact that many women who reported ill after probing were unable to utilise health care facilities and spend money on treating illnesses.

The overall expenditure pattern clearly reveals that households spend a substantial amount on treatment of illness and that females suffer more from illnesses, do not seek treatment for very high number of illness episodes and the amount of money allocated by the households for females is very meager as compared to the need. Thus, there exists a bias against spending on health care for women.

Components of Costs

Documentation of expenditure necessitates recording of expenditure items under various heads. Broadly, the expenditure incurred can be classified into two types - direct expenditure and indirect expenditure. The main components of direct expenditure are payment made to the health care provider, expenditure incurred on medicines, investigations carried out for diagnosis, expenditure on surgery and charges for hospitalisation. Indirect costs would include expenditure on special diet for illness or events, travel to the facility, bribes and tips paid, costs on gifts given and rituals performed. Health care utilisation as defined in this study also included treatment taken at home using home remedies and rituals performed at home or elsewhere.

One of the major problems faced by the investigators was in recording information in which the husband or another person had made payments at the health facilities bacause we had interviewed women in the household. It is well known that the purse strings are controlled by the head of the household or the main earner, who often happens to be a male member. In some cases the women respondents were unable to provide the break up of costs incurred and could only provide information on the combined costs incurred. We recorded this expenditure as combined expenses and probed further about the major components for which the costs were combined. In the present study, the major part of the expenditure - around 40% - were recorded as combined costs incurred. In 90% of all such illness episodes, the combined expenditure was incurred on the fees paid to the doctor and purchase of medicines. This fact is well substantiated by other similar studies conducted in which the expenditures incurred combined for doctors' fees and medicines and were shown separately.

The expenditure incurred on purchase of medicines accounted for 36.37% of the total costs incurred by the sample population, with the major amount being spent by females. The expenditure on doctors fees accounted for 6.49% **(Table 6.2).** If we add the combined costs and expenditure incurred on doctors fees and medicines, nearly 90% of the household expenditure was incurred on doctors fees and medicines. Thus, this forms a major component of direct expenditure. In the Madhya Pradesh (FRCH) study also we find that three fourths of the costs incurred are for doctors fees and medicines. Similar findings are revealed in the NCAER study which found that 77.6 % of the expenditure in urban areas going in for fees and medicine.

When we study expenditure per paying episode (i.e where the household incurred some cost) we find that for most of the components of costs the expenditure goes up substantially. The expenditure incurred goes up from Rs. 6.20 to Rs. 50.34 for doctor's fees and from Rs. 35 to Rs. 126.40 on medicines. This clearly reveals that the high cost of health care for those who were paying for treatment. In this case too, the major part of the cost was in the form of payment of doctors fees and purchase of medicines.

Gender differentiated analysis of the spending on components of health care do not reveal much difference in terms of proportion of expenditure incurred on each component except that expenditure in illness episodes affecting women, more was spent on purchase of medicine, this comes out more clearly as we examine the per paying episode where it was Rs. 136.55 for women as compared to 105.69 for males. More was spent on special diet for males than females.

Socio-economic differentials by expenditure on Illness

Household expenditure on health care is determined by various factors, some of them existing within the family and some of them outside. The differentials in terms of spending when members in the household fall ill are based on factors such as the ill persons' importance in the family in terms of their relationship, age, marital status, education, occupation and earning status, household income and most important of all the gender of the person In addition to the individual related factors which affect the spending on health care, other factors which influence the spending behavior are the socio economic class of the family, place of residence, type of illness, treatment taken, type of health facility utilised, distance of the health facility and so on.

One of the major limitations of this study, as mentioned in Chapter II, has been that we could not develop a class scale based on the information provided by the respondents as majority of the women respondents were unable to provide information on household income Since income is one of the major factors of the class scale, we could not use the data to develop the same.

Location of households: The location of the households and environment to a large extent determine the socio economic condition of the households. It was found that though the slum locality had a high morbidity of 436 episodes per 1000 persons, the total expenditure incurred for illness episodes in the slum area was just Rs 17,388 (23.35%) of the total expenditure of Rs. 74,455, the rest going to treating those falling ill in the non-slum area **(Table 6.3)**. We find that the per episode costs among the slum households was as low as Rs. 39 88, lower than the mean per episode cost of Rs. 95.45. In comparision, the expenditure in the non-slum area was Rs. 509.52 per episode. In terms of utilisation, we find 68% of the illness episodes in the slum households and 75% of the episodes in the non-slum households had utilised some facility. In terms of gender difference, we find that both slum and non slum households are spending less on illness episodes affecting women than men. This is inspite of the fact that in both localities reported more illness than males. The pattern also reveals that the gender difference of spending between males and females is more pronounced in the non-slum area.

The people in slum who form a bulk of the population and suffer more from illnesses, are not able to spend due to their low income and lower socio economic status Though the classification of the slum and non-slum areas cannot be used strictly *in lieu* of the class scale, some comparison can be done as people from the lower socio economic scale reside in slum and those from the higher socio economic scale reside in better off houses. In the present study we find that the higher the socio economic scale, the higher is the spending on health care. If we take the slum and on-slum categories as a proxy indicator for class, the findings are quite closer to other studies where the class scale has been used.

Age Group: A major factor that determines the expenditure incurred by the household on individuals is in relation to the age of the person falling ill. In the present study we find that those in the age group of above 45 years spend the highest in terms of per episode cost, which is Rs. 157.25. The major part of this expenditure is for illness episodes affecting male illnesses Expenditure on illness affecting children works out to Rs. 91.92, *which is quite less as nearly 23% of the children had reported ill.* Further the expenditure incurred on persons in the age categories 0-11, 18-25 and 26-35 years is lower than the average expenditure of Rs. 95 45 per episode for all illness episodes. As the age increases from 12 years to 45 years,

the gap in expenditure on males and females widens. Only in the age group of 12 to 17 years, the expenditure incurred on females is significantly higher at Rs. 260.79 than on males at Rs 41.05. Expenditure on women is also slightly higher in the age group between 18-25 years **(Table 6.3).** *This is due to the fact that during this period women are given importance due to the reproductive role they perform.*

The expenditure incurred on women above the age of 36 years as compared to males is very low of Rs. 50.90 for 36-45 years age-group and Rs. 97.94 for above 46 years age-group. This is due to the fact that women of this age have already completed child bearing and are no longer considered vulnerable. There is significant neglect of elderly women although they are almost as prone to illness as younger women. The expenditure on female children is less than what is spent on male children. This clearly brings out that discrimination against females in provision of health care occurs at every stage of life.

Marital status : The major health expenditure incurred is made on persons who are currently married (Rs 51,563 out of Rs. 74,455 or per episode cost of Rs. 113.32), followed by expenditure on those illnesses affecting the never married. The expenditure incurred on illness affecting widows and widowers is Rs.35.80 (total Rs. 1647 out of Rs. 74,455). This clearly shows individuals who have no spouses are not able to spend on health care.

The status of women in the family is determined by her relationship to others in the family, more so her martial status. The expenditure incurred on currently married women was less than half (Rs. 90.26 per episode) as that of the males in the same category. Though the expenditure goes up for those who had utilised health facility in the same category, we find that there were only 126 female illness episodes where treatment was sought **(Table 6.3).** Only with regard to expenditure incurred on widows and widowers, we find that expenditure on illness episodes of widows is higher (Rs. 37.11) than that on widowers. However, in camparison with the general population, the amount is very small. In sharp contrast females who are divorced/separated/husband away at work, spend a negligible amount on illness when it affects them. The findings bring out clearly that the marital status of women in the households is a major factor in terms of access and expenditure on health care. Single women are most vulnerable when illness strikes them because they are not able to utilise health facilities.

Education: Analysis in terms of the educational status reveals that those with higher education spend more on their illness. Those who are illiterate are just spending Rs. 45.51. Significantly less than the average per episode cost for the entire population that had fallen ill. We further find that out of 173 episodes afflicting illiterate women, an expenditure of Rs. 40.65 per episode was incurred. While in only 99 episodes out of 173, women had utilised any health facility, out of 22 episodes among illiterate men, for 18 episodes health facility was used.

Females who are more educated were spending more, especially those with secondary / higher school education and the qualified professionals. **Table 6.3** also reveals that health care is utilised in more number of male illness episodes compared to the female illness episodes and the difference in quantum of expenditure incurred on them was vast.

Occupation & Earning Status: The occupational and earning status of the individuals in the household determine, to a substantial extent, the expenditure incurred by the households. In the present study it was found that though the number of episodes affecting the non-workers and housewives was high (516 episodes), the per episode expenditure for them was just Rs 83.96. With specific reference to housewives, though they had the maximum number of episodes, the expenditure per episode was just Rs. 92.84. For the lower level professionals, inspite of having just 13 illness episodes, the per episode cost was Rs 423.7, the gender difference being very vast **(Table 6.4).**

In relation to the earning status, the per episode expenditure was the highest among non earners (Rs. 173.39) and the lowest amount the equal earners (Rs. 40.80). The expenditure on unskilled and semi-skilled categories was very low, at Rs. 28.47, as compared to the average expenditure for all persons, at Rs. 95.45. Non-working children and adolescents accounted for 101 episodes, and spending on an average at Rs. 142.97 per episode **(Table 6.4).** Across all categories (except the unskilled and semiskilled workers, where the difference was only marginal), the expenditure on male illness episodes was on the higher side than the females with the difference being greatest among the lower level professionals. In terms of gender difference, we find that where the women is an equal earner, the per episode cost (Rs. 41.83) is higher than the males (Rs. 35.00). The pattern of expenditure as studied according to the type of occupation and earning status clearly show that those who are employed at a higher level and have an income, spend more on illnesses affecting them. Where women are earning, more so when as an equal earner, their illnesses are better looked after and money is spent on them.

Expenditure by type of morbidity:

The type of illness affecting the person is also a determining factor for spending on the treatment. The majority (200 illness episodes) were reported as respiratory illness followed by reproductive illnesses afflicting women (167 episodes). In terms of expenditure incurred, we find that the major expenditure, both in terms of as percentage (22.38%) to the total expenditure and as per episode cost, went for treating gastro-enteric illness.

In terms of per episode expenditure incurred on respiratory and reproductive illness, we find that it was less than the average expenditure incurred of Rs. 95.45. Inspite of reproductive illness accounting for 21.41 % of all episodes, the expenditure incurred in its treatment was only 19.31% of the total expenditure and the per episode cost amounted to only Rs 86.11 **(Table 6.5).** Out of the total 167 reproductive illness episodes, for only 65 episodes women had utilised some health facility incurring an average expenditure of Rs. 221.26. This clearly shows that on an average the expenditure incurred on reproductive illness for those that who paid for treatment was very high and that the kind of reproductive ilnesses they suffer need greater or expensive care.

The lowest expenditure incurred was on weakness (Rs. 35.15). On fevers, which affected a large proportion of the people, the expenditure incurred was very low and the gap in spending on the males and females was very vast. For illness, which was categorized as "others", the per capita expenditure was a high Rs. 249.30.

In terms of gender difference, it was found that on illness episodes related to weakness and eye/nose/throat, males were spending more, but when viewed in terms of total expenditure,

the quantum is quite small. The utilisation of facilities for illness episodes affecting females, especially weakness, aches and pains is very low as compared to the males in the same category. The above analysis of expenditure clearly shows that although many suffer from respiratory problems, the expenditure incurred is far too less than what the illness accounts for. The morbidity of women is very high, but the expenditure incurred on them is very low and in comparison with the males the difference is vast, especially for those suffering from fevers.

Expenditure incurred by utilisation of health facilities

Type of treatment taken: Out of total expenditure incurred, the major expenditure was on medicines dispensed (44.78%), followed by expenditure incurred on special care which included investigations (30.64%). Medicines dispensed and injections accounted for more than 60% of the total expenditure, most of the amount was spent in private health facilities. In term of gender difference, we find that the total expenditure incurred on females was more than that for males for all the categories except those related to special care and investigations, where the expenditure on male episodes was nearly double than females **(Table 6.6)**. In terms of total expenditure incurred we find that the expenditure incurred on males was higher at Rs. 163.32 per treated episode than for females at Rs. 131.05.

Type of health facility: As the utilisation clearly reveals, a majority of illness episodes were treated in private facilities. Nearly 85.41% of the expenditure was incurred on the private facilities, with insignificant gender difference. The expenditure on public facilities which treated only 53 episodes, was Rs. 179.89 per episode, while expenditure on private facilities which treated 473 episodes, was Rs. 134.46 per episode. Thus, in the present study we found that the expenditure incurred was higher in public facilities than in private facilities. *This is due to the fact that the number of episodes of females is higher in our study. We also find that more number of female illness episodes were going to private facilities and the males were spending more in the public health facilities.* The **Table 6.7** clearly reveals that 11.49% of the total expenditure on female illness episodes was spent on the public facilities and in comparison, among males 14.99% of the total expenditure on males was being spent on public facilities. More was spent on men than on women in both, public and private facilities. The expenditure on males was also higher when the illness episodes got treated by a relative or an NGO.

This clearly brings out that the use of government facilities is actually not free, a payment needs to be made for buying medicines not supplied by the government facility. Further, a study of the components of expenditure clearly shows that the costs is dominated by the expense on purchase of medicines. This is evidence that public facilities do not have enough medicines and the patients have to purchase the medicines from outside. The findings are similar to the study conducted by the FRCH in Madhya Pradesh.

An analysis on expenditure and the structure of the health facility reveals that expenditure incurred on the female illness episodes was more than those of males when either a dispensary or health post were used. The expenditure incurred on treating illness in hospitals / nursing home for the males was much higher than the females, both as a proportion of the total costs and per episode expenditure. Overall, we find that the major expenditure was incurred on the use of dispensary / health post as in the majority of the cases the treatment was based on out patient care. The majority of dispensary / health post utilised are in the private sector which

are convenient both on account of being close to the place of residence and being open during the late and early hours of the the day . The women utilised chemists shops more than the males, but the average expenditure incurred by them was less than that of males (Rs. 39.71 per episode for 38 illness episodes for females as compared to an average Rs. 98.25 per episode for 12 episodes for males). Home remedy was utilised mostly by women.

CHAPTER VI

Expenditure on Health

Tables

Table : 6.1 **Characteristics of expenditures on Illness**

Characteristics	Males	Females	Total
Total number of persons in sample	1113	1036	2149
Total expenditure incurred (in Rs.)	27,929	46,526	74,455
Total number of illness episodes	188	592	780
Average exp. per capita (monthly) (in Rs.)	25.09	44.90	34.64
Average exp. per capita (yearly) (in Rs.)	301.08	538.80	415.68
Average exp. per episode (in Rs.)	148.56	78.59	95.45
Exp. on episodes without probing (in Rs)	-	111.72	-
Exp. on episodes with probing (in Rs)	-	59.58	-
Total number of episodes in which health facilities utilised	178	375	553
Average exp. per health facility utilised in Rs.	156.90	124.06	134.63
No treatment taken (episodes)	17	237	254
Number of paying episodes	145	301	446
Average expenditure (paying episodes) (in Rs.)	192.61	154.57	166.93

Table : 6.2 **Expenditures on Components of Health Care** (in Rupees)

Health Care Costs	Percentage to total expenditure			Expenditure per episode (Average)			Exp. on paying episodes (Average)		
	Males	Females	Total	Males (188)	Female (592)	Total (780)	Males	Females	Total
Doctor Fees	6.10	6.69	6.49	9.15	5.26	6.20	81.90 (21)	64.85 (48)	50.34 (96)
Medicines	26.86	42.55	36.37	39.91	33.45	35.00	105.69 (71)	136.55 (145)	126.40 (216)
Investigations	5.44	3.16	4.01	8.08	2.49	3.84	152.00 (10)	113.30 (13)	130.13 (23)
Surgery	0	1.71	1.07	0	1.35	1.02	0 (0)	800.00 (1)	800.00 (1)
Hospitalisation	4.94	4.86	4.53	7.34	3.38	4.33	690.00 (2)	1000.0 (2)	845.00 (4)
Travel	4.60	4.86	4.76	6.83	3.82	4.54	61.19 (21)	58.00 (39)	59.11 (60)
Ritual	0	0	0	0	0	0	0	0	0
Diet	3.74	1.70	2.47	5.56	1.34	2.36	87.25 (12)	46.70 (17)	63.48 (29)
Git/Bribes	0	30 0.06	30 0.04	0	0.05	0.04	0	30.00 (1)	30.00 (1)
Combined Costs	47.88	34.90	39.77	71.13	27.43	37.96	127.36 (105)	83.70 (194)	9.90 (299)
Any Other	0.35	0.03	0.15	0.53	0.02	0.15	100.00 (1)	15.00 (1)	57.50 (2)
Total Costs	27929	46526	74455	148.56	78.59	95.45	192.61 (145)	154.57 (301)	166.93 (446)

Note : Figures in brackets are number of cases

Table : 6.3 Expenditure by socio economic diffrentials

	Expenditure incurred Per Episode			Expenditure incurred Per Episode facility utilised			Total Exp.
	Males	Females	All	Males	Females	All	TOTAl
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Locality							
Slum	103.05 (132)	74.24 (402)	32.56 (534)	97.13 (140)	100.82 (296)	39.88 (436)	17388
Non Slum	255.82 (56)	87.79 (190)	231.97 (246)	409.21 (35)	216.60 (77)	509.52 (112)	57067
NR/NA	-	-	-	(3)	(2)	(5)	-
Age Group							
0-11	106.18 (81)	80.10 (97)	91.92 (178)	108.86 (79)	84.45 (92)	95.68 (171)	16362
12-17	41.05 (19)	260.79 (39)	188.81 (58)	45.87 (17)	376.69 (27)	248.88 (44)	10951
18-25	72.62 (27)	86.71 (142)	84.46 (169)	78.42 (25)	148.34 (83)	132.17 (108)	14275
26-35	183.00 (21)	37.91 (168)	54.03 (189)	202.25 (19)	76.73 (83)	100.12 (102)	10213
36-45	292.78 (24)	50.90 (90)	101.80 (114)	351.32 (20)	91.62 (50)	165.80 (70)	11606
46-97	357.43 (16)	97.94 (56)	157.25 (70)	381.25(15)	139.17 (38)	207.69 (53)	11008
NR/NA	(0)	(2)	(2)	(3)	(2)	(5)	-
Martial Status							
Currently married	262.24 (61)	90.26 (394)	113.32 (455)	307.61 (52)	164.64 (216)	192.39 (268)	51563
Never married	94.30 (120)	63.92 (147)	77.58 (267)	96.71 (117)	75.16 (125)	85.59 (242)	20714
Widow/widower	22.00 (4)	37.11 (42)	35.80 (46)	88.00 (1)	59.94 (26)	61.00 (27)	1647
Others	175.66 (3)	0.44 (9)	44.25 (12)	105.39 (5)	0.66 (6)	48.27 (11)	531
NR/NA	-	-	-	(3)	(2)	(5)	-
Educational level							
Illiterate	83.72 (22)	40.65 (173)	45.51 (195)	96.93 (19)	71.03 (99)	75.22 (118)	8876
Primary	121.81 (32)	132.48 (91)	129.70 (123)	125.73 (31)	194.44 (62)	171.54 (93)	15954
Second-High sch	70.90 (44)	80.67 (176)	78.72 (220)	69.32 (45)	147.88 (96)	122.82 (141)	17319
Matriculation	632.37 (16)	89.31 (60)	203.64 (76)	595.17 (17)	148.85 (36)	292.01 (53)	15477
Higher sec-grad-p.g.	115.47 (17)	36.09 (21)	71.60 (38)	130.85 (15)	58.29 (13)	97.17 (28)	2721
Tech-prof-other	73.00 (2)	127.49 (4)	34.66 (6)	73.00 (2)	169.98 (3)	41.60 (5)	208
Pre-school & NR/NA	124.39 (55)	119 62 (59)	113.93 (122)	139.62 (49)	106.92 (66)	120.86 (115)	13900
Total	148.56 (188)	78.59 (592)	95.45 (780)	156.90 (178)	124.06 (375)	134.63 (553)	74455

Note: (1)Figures in parenthesis are number of cases (2) 2 in facility utilised no response, (3) Others includes, husband away at work, Seperated/divorced/d, Engaged, married but, Any other, No Response

Table 6.4 Expenditure by occupation and earning status

	All Episodes			Facility utilised			
Occupation category	Males	Females	All Persons	Males	Females	All Persons	**TOTAL EXP.**
	Rs	Rs.	Rs	Rs	Rs	Rs	Rs
Nonworkers & housewives	103.55 (67)	81.04 (449)	83.96 (516)	103.55 (67)	134.26 (271)	128.18 (338)	43327
Unskilled & semi skilled	20.85 (7)	30.44 (27)	28.47 (34)	29.19 (5)	68.49 (12)	56.94 (17)	968
Skilled & service sector	127.50 (60)	43.26 (50)	89.20 (110)	139.09 (55)	72.10 (30)	115.44 (85)	9813
Lower level Proff./ proff & buisness	1306.50 (4)	31.44 (9)	423.77 (13)	1306.50 (4)	47.16 (6)	550.90 (10)	5509
Non working children & adolecents	167.31 (47)	121.74 (54)	142.95 (101)	167.31 (47)	121.74 (54)	142.95 (101)	14438
NR/NA	35 (3)	98.33 (3)	66.66 (6)	-	200.00 (2)	200.00 (2)	400
Earning Status							
Non earner	331.46 (26)	26.74 (27)	173.39 (53)	359.07 (24)	40.11 (18)	218.80 (42)	9190
Main earner	77.87 (48)	28.13 (23)	61.76 (71)	91.16 (41)	53.91 (12)	82.73 (53)	4385
Supplealestary earner	83.94 (17)	41.83 (48)	52.85 (65)	83.94 (17)	125.84 (26)	79.88 (43)	3435
Equal earner	35.00 (3)	41.92 (14)	40.82 (17)	35.00 (3)	73.36 (8)	63.09 (11)	694
Housewife	0 (0)	95.15 (366)	95.15 (366)	0 (0)	169.05 (206)	169.05 (206)	34825
Not applicable	99.28 (90)	77.85 (107)	87.64 (197)	96.07 (93)	79.32 (105)	87.20 (198)	17266
NR/NA	1276.25 (4)	35.85 (7)	406.90 (11)	-	-	-	5356
TOTAL	148.56 (188)	78.59 (592)	95.45 (780)	156.90 (178)	124.06 (375)	134.63 (553)	74455

Note : Figures in parenthesis are number of cases

Table : 6.5 Expenditure by Type of Morbidity

Type of Morbidity	All Episodes			Facility utilised			Total Exp.
	Males	Females	All	Males	Females	All	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Reproductive	0 (0)	86.11 (167)	86.11 (167)	0	221.23 (65)	221.26 (65)	14382
Aches, Pains	82.95 (24)	43.91 (74)	53.47 (98)	94.80 (21)	75.56 (43)	81.89 (64)	5241
Weakness	9.50 (4)	36.73 (65)	35.15 (69)	38.00 (1)	85.26 (28)	83.65 (29)	2426
Fevers	142.25 (40)	57.40 (67)	89.12 (107)	135.47 (42)	65.18 (59)	94.41 (101)	9536
Respiratory	93.80 (85)	63.06 (115)	76.13 (200)	100.92 (79)	66.53 (109)	80.98 (188)	15226
Gastro-int	316.65 (23)	213.20 (44)	248.71 (67)	346.80 (21)	234.52 (40)	273.18 (61)	16664
Eye. nose	37.00 (5)	58.70 (31)	55.69 (36)	46.25 (4)	113.73 (16)	100.25 (20)	2005
Others	681.28 (7)	145.03 (29)	249.30 (36)	681.78 (7)	323.52 (13)	448.75 (20)	8975
NR/NA	-	-	-	-	(2)	-	-
TOTAL	148.56 (188)	78.59 (592)	95.45 (780)	156.90 (178)	124.06 (375)	134.63 (553)	74455

Note : Figures in parenthesis are number of cases

Table : 6.6 Expenditure by type of treatement received

Treatment received	Episodes Treated			
	Males	Females	Total	Total
Dispensed Medicines	99.71 (101)	103.88 (224)	102.58 (325)	33341 (44.78%)
Dispensed medicines including / only injection	106.00 (57)	123.68 (89)	116.78 (146)	17050 (22.89%)
Special care including investigations	1311.44 (9)	551.05 (20)	787.03 (29)	22824 (30.64%)
Home remedy	3.25 (4)	55.77 (22)	47.69 (26)	1240 (1.66%)
Total	163.32 (171)	131.05 (355)	141.54 (526)	74455

Note * : As % to total coloum total

Table : 6.7 Expenditure by Utilisation

	As % to total expenditure			Per episode exp. treated		
	Male	Female	Total	Male	Female	Total
Type of facility	%	%	%	Rs.	Rs.	Rs.
Private	84.27	86.10	85.41	154.83 (154)	125.59 (309)	134.46 (473)
Public	14.99	11.49	12.80	261.75 (16)	144.49 (37)	179.89 (53)
Home Remedy	0.01	0.52	0.33	0.75 (4)	11.09 (22)	9.50 (26)
Relative/NGO	0.63	1.71	1.30	176.00 (1)	159.60 (5)	162.33 (6)
NR/NA	0.08	0.16	0.13	8.33 (3)	37.50 (2)	20.00 (5)
No Treatment	-	-	-	0 (17)	0 (237)	0 (254)
Total	100	100	100	156.90 (178)	124.06 (375)	134.63 (553)
Institution						
Disp./ health post	62.53	79.15	72.92	123.86 (141)	133.43 (276)	130.20 (417)
Hosp/Nursing home	32.73	15.39	21.90	481.21 (18)	198.97 (36)	301.96 (54)
Chemist shop	4.22	3.24	3.61	98.25 (12)	39.71 (38)	53.76 (50)
Home remedy	0.50	2.04	1.46	35.50 (4)	43.22 (22)	42.04 (26)
Any other / NR/NA	-	0.16	0.10	0 (3)	16.66 (3)	10.41 (6)
No Treatment	-	-	-	0 (17)	0 (237)	0 (254)
Total	100	100	100	156.90 (178)	124.06 (375)	134.63 (553)

CHAPTER VII

Maternity & Contraception

In the earlier chapters we had examined various issues related to illness. Maternity events such as pregnancy, delivery, abortion, post natal care and use of contraceptives are not illness as such but important aspects which affect the women's heath status to a very large extent. In this chapter we have analyzed the various aspects related to maternity and contraception.

In the present study we had taken a reference period of 1 year (May 1995 to June 1996) to record the information related to maternity events and use of contraceptives from amongst the sample population. Maternity events included pregnancies, deliveries and the abortions reported. Pregnancies included those which had not been terminated or concluded in abortion or delivery in the reference period. In recording deliveries all pregnancies which had concluded in the birth of a child for the reference period was considered. Abortions included all induced and natural abortions in the same period. As this was a one point study there was no overlapping of pregnancies as found in other studies which had been done over different time periods. With regard to contraceptives used we recorded all the contraceptives used by women either as a spacing or terminal method in the reference period of one year.

Overall findings

In the entire sample there were 1036 women of whom 697 women were above the age of 12 years of which 466 were currently married women. There were a total of 112 maternity events recorded for 111 women in the sample. These included 49 pregnancies, 60 deliveries and 3 abortions. In one case a women had two events, an abortion followed by a pregnancy **(Table 7.1).** With regard to contraceptive users there were 26 women who utilized 27 contraceptives, a women had utilized Intra Uterine Device (IUD) twice **(Table 7.2).** There were a total of 139 non-illness events (includes maternity and contraceptives) among women in the 18 to 45 years reproductive age group. Out of these events 35% were pregnancies, 43% deliveries, 2 % abortions and 19 % were contraceptions. Out of the 27 contraceptive users 10 were using Oral Pills (OPs), 13 were using IUDs and 4 sterlisations. Actually the total sterilization's recorded during the reference period were 7 but 3 of them were done immediately after undergoing delivery. Since it was difficult to divide utilization of health facilities and expenditure for the two events, for the purpose of analysis we have taken the 3 cases primarily as delivery events. For the purpose of our analysis, we have considered only 4 sterilisations.

More than four fifths of all events and all the abortions were reported from the slums and less than one sixth were from non-slum localities. The distribution of women according to age groups shows that the majority of women undergoing pregnancy, delivery, and abortions were in the 18 to 25 years age group **(Table 7.3).** There was a higher percentage of women in the 26 to 35 years age group who were using contraceptives. More than half of the total contraception users were above 25 years.

With regard to number of living children we find that about three fourths of the total women belong to those having between 1 to 3 children, 14% having more than 3 children and 13% have no children. About 35% of the pregnant women had no living children, 58% of them have 1 to 3 children and 6% have more than 3 children **(Table 7.3).**. Among the women who

had delivered 38% have only 1 child, around 55% have 2 to 4 children and 7% had more than 4 children falling in the 'high risk' category. Among the contraception users there were no women who were using contraceptive with no children and less than 20% of the users had 1 child. Around 59% of the contraceptive users had 2 to 3 children and 22% had more than 3 children.

Utilization of health facilities

No treatment / no health facility utilized in the case of pregnant women means no Ante Natal Care (ANC) including examination, immunization etc., which in the present study was as high as 43%. However, we must note that there were only 4 cases i.e. 19% 'no treatment cases' from the non- slum areas. If we consider only women from the slum areas with no treatment, we find that about 70 % are in the first and second trimester and the rest i.e. 29% are in their third trimester **(Table 7.3A).** Overall more than a quarter of the pregnant women did not take any treatment during the first trimester, another 47% did not use any health facility during their second trimester. About 23 % had not sought any treatment even when they were in the third trimester. Those pregnant women who did seek treatment or utilize health facilities, a higher percentage (57%) utilized private facility and only 32% utilized public facilities **(Table 7.4).** The rest received treatment from other health facilities.

In case of delivery, 20% of the deliveries took place at home, (own or natal home), without the assistance of a formally trained person. Deliveries in public facilities accounted for 30% and private accounted for 31.7% **(Table : 7.5)**. Examining the utilization by slum and non slum areas we find that in the slum areas 27% of women utilized private, 31% public, 23% were at home and 16% utilized other facilities. The preference for private is not as much as that among non-slum women. All the women who have delivered at home in our study belong to the slum area.

For the 3 abortions reported private health facilities had been utilized. For contraceptions we find that the use of private health facilities is much higher than public. This could be because private facilities includes chemist who dispense Oral pills over the counter. If we exclude the 10 cases of OP users, we find the dependence on private is lowered to some extent. What is important to observe is that the public health facility is being utilized by only 38% of the total contraception users. In terms of providers of care for all the events it was found that the female doctor was preferred by 21.5%, 14.3% by the male doctor, nurse 11% and the local chemist/ CHV/ Dai by 11.5% **(Table 7.6).** In the case of delivery about 38% recalled about receiving services from more than one provider.

In case of events about three fourths of the women utilized health facility which was at a distance of not more than 1/2 hour. The rest one fourth of them utilized health facilities which was more than 1/2 hour distance. This situation is true for all events, except contraception where 37% utilized health facility which was more than 1/2 hour away **(Table 7.6)** . On the whole, we find that even for reproductive events, more women are utilizing private rather than public health facilities.

The common reasons reported for selecting providers and health facilities by 18.6% of the total events was past experiences of self, relatives and other people. Further 18.6% reported easy physical access as a reason for choosing the facility **(Table 7.7).** Economic access in terms of free and subsidized services, or benefit under scheme was also an important reason

reported by 11.6% of the women. Another 12% reported that they did not have much choice left since that particular facility was the most appropriate at that time for whatever reason. About 7% had stated good and appropriate services provided by the facility being the reason. This includes, the presence of a lady doctor, one service being linked to other services and on the advice of another doctor.

Expenditure on maternity events & contraception

In this section we have analyzed expenditures incurred on the maternity events and contraceptives, which broadly comes under health care costs but are not costs incurred on illness. A point to be noted is that the expenditure incurred could not be bifurcated separately for delivery and Post Natal Care as the respondents were unable to report the break up of expenditure in terms of amount spent separately on the women and their children separately. It is quite understandable as for the post natal care both the mother and child when they go to a health facility mostly for consultation to the doctor is for both of them in most of the cases especially just after delivery. Therefore we have taken the total expenditure incurred on delivery and PNC combined. The same is true for cases of abortions.

The total expenditure incurred on all maternity events was Rs. 159052, working out to a mean expenditure of Rs. 1433.71 per event with 91% of the expenditure incurred on delivery & PNC, pregnancy accounting for 6.56% of the total costs incurred **(Table 7.1).** The expenditure on abortions was very small as the number of cases recorded were just 3. The average expenditure on pregnancy was Rs 213.08, delivery Rs 2428.90 and abortion Rs 989.00. Of those 28 pregnant women who utilized a health facility the average paying event cost was Rs. 372.89.

The total expenditure incurred by those who utilized contraceptive methods was Rs 7283, out which more that 50% of the expenditure incurred was on those who utilized IUD's and 45% was spent on the 4 sterilizations **(Table 7.2).** The average expenditure incurred on oral pills per user was Rs. 13.20, for IUCD user Rs 297.77 and for sterilization Rs 820 and for all the users it was Rs. 769.74. The expenditure incurred on the use of contraceptive is closer to the total per capita expenditure incurred on the sample population of Rs. 415.95. There is a high amount of expenditure incurred by the households inspite of the massive funding of the family planning program.

Components of expenditure

As seen in the earlier section on illness where we had analyzed the expenditure incurred on illness by its components, here too we analyzed the expenditure incurred on maternity events and contraception. Maternity events incur some specific expenditure in addition to the health care costs especially special investigations such as sonography.

Direct expenditure : Doctors fees and medicine accounted for 20% of the total costs incurred on events. Medicines accounted for 13.98% of the total costs alone. As a proportion of the costs on medicines we find that a substantial amount Rs. 19457 out of a total of Rs 22253 was spent on deliveries. It accounted for 25% of the costs incurred on total expenditure on pregnancy. A higher sum was spent on doctors fees by those who were pregnant and in comparison the amount spent on doctors fees for those who had delivered was just 6.04% of the total costs incurred on deliveries **(Table 7.8).** It has to be noted that for deliveries the

major expenditure was incurred on hospitalization which includes doctors fees and medicines Out of a total expenditure of Rs. 10135, 90% was spent by those who had delivered In addition to this if we add the combined costs incurred in delivery as hospitalization (since many were not able to give the breakup) which was Rs. 72956 (50.06%) of the total costs incurred on deliveries we find that a substantial amount goes for hospitalization when deliveries take place. 6 women who had delivered had been hospitalized and had paid on an average amount of Rs. 1533.33 Those who underwent abortion paid even a higher amount for hospitalization as for the 2 cases the average expenditure was Rs 467 50 Those who underwent abortions, just on the head of hospitalization 31.51% of the total costs incurred on abortions in addition to 41.64% of the costs went into abortions. In terms of expenditure incurred on a per event basis we find that a higher amount was being paid on doctors fees and medicines by those who had delivered. The paying events were incurring Rs. 733.83 on just doctors fees alone and Rs 253.28 for those pregnant. This clearly shows that for institutional deliveries and abortion services the major expenditure is incurred on hospitalization. The costs included in hospitalization would generally cover, fees charged by the doctor for conducting the delivery/abortion, labour room charges, staying charges, specialists if called charges, among a whole lot of other charges.

Investigations and sonograp by were mainly incurred on those who were pregnant, nearly 24% of the total costs incurred on pregnancy going in for them. It can be seen that nearly 13% just goes for sonography tests done during pregnancy. We find that on an average for pregnancy Rs. 24.12 per pregnancy event. As seen not many had utilized the facilities, and of those who had paid it worked out to Rs. 197.00 and for those who had delivered the costs shoot of to 10 times for those who had paid. 3 cases each had paid for sonography for pregnancy, delivery and 2 abortion events. The women who were pregnant were paying on an average Rs. 466.67 for sonography.

Hence we can see that more than 75% of the health care costs going for direct expenditure, in case of pregnancy doctors fees and medicines accounting for the major share, and in case of delivery and abortions the major share going in for hospitalization followed by doctors fees and medicines.

Indirect expenditure : Travel expenditure was incurred by majority of the events and we find that on an average Rs. 15.35 for pregnant women, Rs. 43.55 for those who had delivered and for abortion Rs. 52.33. Travel just accounted for 2.21% of the total costs incurred on all events with the major amount being spent by those who had delivered. Gift and bribes were only incurred by those who had delivered and it accounted for 2.23% of the total costs the average costs working out to Rs. 59.21. In terms of diet we find that those pregnant were not spending at all except in one case Rs. 500.00, with regard to women who had delivered on an average Rs. 191.08 was spent and of those who had paid it was Rs. 545.95 **(Table 7.8).** The women who had undergone abortions were not spending on diet at all. The women who had delivered were spending the most on diet out of a total expenditure of Rs. 11965 on diet Rs. 11465 was being spent on women who had delivered accounting for 7.86%. Expenditure on rituals also followed the same pattern as with regard to the diet. We find that pregnant women were not spending much as compared to those who had delivered the amount was Rs. 250.50. and the amount going up to Rs. 1878.75 for those who had paid. This expenditure could be with regard to expenses incurred after the delivery as in tradition.

All the contraceptive users had made some form of payment either as direct expenditure or indirect expenditure. All the users had spent on travel, average expenditure worked out to Rs 12.55. The expenditure on device was mainly spent on purchase of oral pills (**Table 7.9**). The expenditure on medicines was incurred by nearly all the IUD's and sterilization users where the average expenditure was Rs. 35.12. The expenditure on diet was incurred by all those who had undergone sterilization.

Socio economic differentials by expenditure

The differentials in expenditure on maternity events and contraception have been analyzed examining the age of the women, number of living children, education, occupation, earning status and locality of the household.

Age : In terms of expenditure incurred on maternity events the age of the women becomes an important factor with regard to the expenditure incurred by the household. For all the events in the sample the highest expenditure was incurred on the age group of 26-35 years, Rs. 1816.29, the major expenditure incurred on 22 deliveries, average expenditure working out per delivery Rs. 3227.04. Those who were pregnant in this age group spending a measly amount of Rs. 49.88,
less than the average expenditure incurred on pregnancy of Rs. 213.08 **(Table 7.10).** The amount spent is very low considering the fact that this amount would not even cover the basic ANC that needs to be provided in terms of TT injections and iron and folic acid tablets, leave alone other tests, diet etc. The expenditure incurred on women between the age group of 18-25 years was Rs. 318.10 which clearly brings out that more money is spent on pregnant women who are from the younger age group. Further analysis reveals that as the age increases the expenditure on pregnancy reduces drastically. This is also true for deliveries, as we find that 36 deliveries were spending on an average per event Rs. 1991.08 with lowest expenditure of Rs 1530.00 being incurred on those between the age of 36-45. The amount spent was less than the average expenditure incurred on deliveries. In contrast the expenditure incurred on contraception increases as the age increases. **(Table 7.11)**

Number of living children : With regard to expenditure incurred by the households on the women for maternity events we find that it is also determined by the number of living children she has. Taking all the events we find that as the number of children increases the expenditure incurred per paying event reduces. Women who were pregnant and those that had delivered, we find that the expenditure decreases as the number of children increases. For pregnant women having no children the expenditure incurred was Rs. 376.24 (17 events), 1 child Rs. 142.94 (16 events), 2 children Rs 140.44 (9 events) and those having 3 children just Rs. 7.50 **(Table 7.10).**. For women having more than 4 children we find that the expenditure incurred per event was higher in both those who were pregnant and delivered. This skeweness is due to the fact that in I case the expenditure was as high as Rs. 15000 which skews the entire average expenditure. This clearly brings out the fact that women are considered mainly for her reproductive, especially childbearing role and her importance reduces with the number of children she conceives.

Education : We find that the educational status is a major determining factor in terms of expenditure incurred. Higher the educational level the expenditure increases. Women who were illiterate were just spending Rs 1624.50 for 28 deliveries as compared to women who had delivered from the education category of secondary education Rs. 3225.83 **(Table 7.10).**.

Pregnant women who were educated were spending more Rs. 473.33 as compared to the 21 pregnant women who were illiterate and were spending only Rs 290.19.

With regard to contraception the differentials in terms of education reveals that illiterate users were spending on an average Rs. 252.00 mainly on oral pills and those educated between 7th to 8th standard were spending Rs. 443.44 mainly on sterilization. The lowest expenditure was on those educated between the 3rd to 5th standard who were just spending Rs 55.57. **(Table 7.11)**

Location of households : Analysis by the location of the households reveal for all the events, the expenditure incurred by the households living in the non slum area were spending more Rs. 1741.16, than those in the slum area who were spending Rs. 1303.25 which is less than the average expenditure for all the events. We find that in slum areas the expenditure incurred on pregnancy was more than that spent in the non slum area but with regard to delivery and PNC the non slum households were spending more than the slum households, inspite of the fact that the number of deliveries was much higher than those in the non slum area **(Table 7.10).**. All 3 cases of abortions were from the slum areas.

Analysis of expenditure for those who used contraceptives reveals that though the number of users were more in the slum area the expenditure incurred by them was very less as compared to those from the non slum area. The expenditure on 7 contraceptive users in the non slum area was 61.33% of the total costs. In terms of per user costs the non slum users were spending 5 times more (Rs. 638.14) as compared to slum users who were spending Rs. 140.80 **(Table 7.11).** The difference was quite vast with regard to expenditure for all the types of contraceptive users more so with those who underwent sterilization.

Occupation and Earning Status : When we analyze the expenditure incurred by the occupation and earning status of the women who had an event in the households. Women who were working either as unskilled /semi skilled or as any other professional were spending more than the housewives who constituted 55 delivery events and 44 pregnancy events, just spending Rs. 2404.07 per delivery event and 217.75 per pregnancy. Only in one case where the women was an equal earner the expenditure on delivery was as high as Rs. 8075.00 **(Table 7.10).** The status of women in the household in terms of the occupation and earning status determines the amount of money to be spent on their events. The same is true for abortions.

The expenditure incurred by the trimester of pregnancy reveals that pregnant women during the 2nd trimester spent the highest Rs 264.38 followed by those in the third trimester Rs. 225.81.

We find that the contraceptive users who have some occupation spend more on the use of contraceptive especially those in professions such as teachers/nurses. 22 contraceptive users from the category of the housewife were just spending Rs. 266.28.**(Table 7.11)**

Utilization by expenditure

Utilization of health facilities by the women is a major factor in terms of expenditure incurred. For all the events that had utilized facility we find that the major expenditure incurred was by those that were utilizing private facilities and those that had delivered outside Mumbai. The majority of pregnant women of those who utilized were going to the private sector. With regard to those who had delivered an equal number of events were going to the private and public health facilities. The expenditure incurred by both pregnant and those that had delivered was 4 times than what was spent in the public facility **(Table 7.12).** The expenditure on private use of facilities was double the mean expenditure incurred on both pregnancy and deliveries. This clearly shows that women who were pregnant were utilizing private facilities but for deliveries were going to government. This could be due to the costs involved in the private facilities sector which is quite exorbitant. Another major factor is that even in home deliveries (8 cases) there was expenditure incurred because after the delivery they visited the doctor. All the abortion events utilized private health facilities. The mean expenditure incurred per abortion worked out to Rs. 989 per abortion. This is a very high amount when we compare it with per capita expenditure incurred on health care of Rs. 415 per capita.

In terms of health institutions we find that for pregnancies they were utilizing both dispensary / health post and the OPD of the hospital / nursing home and incurring an equal amount of expenditure **(Table 7.12).** The women preferred to go to a women provider, especially those who were pregnant and for delivery. To avail the services of a female doctor or ANM or Nurse, they were paying a higher price especially for delivery events. Inspite of the government's emphasis on Maternal and child health services we find that the amount spent is very high and that there is a major expenditure incurred on utilization of public health facilities.

With regard to utilization for contraception by expenditure we find that the majority of the contraceptive users were utilizing private facilities. Out of the total expenditure of Rs. 7283 incurred, 94.17% was spent in the private facilities, the per user costs working out to Rs. 428.68 as compared to public facilities of Rs. 39.40 **(Table 7.13).** The major expenditure incurred in the private facilities by those who had undergone sterilization, which accounted for a substantial amount. We also find that for IUD's users the expenditure incurred in the private facility was quite high of Rs. 755.80. In terms of utilization we find that the major expenditure was incurred in the hospitals / nursing homes, which was mainly in the private sector. Those who were utilizing public facilities were utilizing mainly the health posts for IUDs.

Table : 7.1 Overall Charactrestics Maternity Events

	Pregnancy	Delivery & PNC	Abortion & PNC	Total
Total number of events	49	60	3	112
Total expenditure incurred	10441 00	145734 00	2967 00	159052
Average expenditure per event	213 08	2428 90	989.00	1433 71
Number of events utilised health facility	28	60	3	91
Number of events treatment not taken	21	0	0	21
Number of paving events	28	60	3	91
Average exp. per paying event	372.89	2428 90	989 00	1747 82

Note : Total number of women in sample : 1036 , Total number of women above the age of 12 years : 697 (3 No responses included), Total number of women currently married in sample population 466.

Table : 7.2 Overall Characterstics, Contraception

	Oral Pill Users	IUCD Users	Sterlisation	Total
Number of women using contraceptives	10	12	4	26
Contraceptives used	10	13	4	27 *
Total exp. incurred the sample (in Rs.)	132.00	3871.00	3280.00	7283.00
Average exp. per contraceptive (in Rs.)	13.20	297.77	820.00	269.74
Average cost per females user (in Rs.)	13.20	322.58	820.00	280.11

Note : * 3 cases included in delivery because they were combined with delivery in terms of utilisation and expenditure and are therefore part of the deliveruy figures.
Per capita cost for currently married females only 466 currently married females in sample therefore 13.45.

Table : 7.3 Cluster, age living children category wise Non illness events recorded

Locality	Pregnancy	Delivery	Abortion	Contraception	Total
Slum	44 (87.7)	51 (85)	1 (33.3)	24 (88.8)	120 (86.3)
Non-slum	5 (10.2)	9 (15)	2 (66.7)	3 (11.1)	19 (13.7)
Age					
18 - 25	30 (61.2)	36 (60)	2 (66.7)	11 (40.7)	79 (56.8)
26 - 35	18 (36.7)	22 (36.7)	1 (33.3)	15 (55.5)	56 (40.2)
36 - 45	1 (2.0)	2 (3.3)	0	1 (3.7)	4 (2.8)
No. of Living Children					
0 Children	17 (34.6)	0	1 (33.3)	0	18 (12.9)
One Child	16 (32.6)	23 (38.3)	0	5 (18.5)	44 (31.6)
Two children	9 (18.3)	19 (31.7)	1 (33.3)	9 (33.3)	38 (7.3)
Three Children	4 (8.1)	7 (11.7)	1 (33.3)	7 (25.9)	19 (13.7)
> than 3 children	3 (6.1)	11 (18.3)	0	6 (22.2)	20 (14.4)
Total	49 (100)	60 (100)	3 (100)	27 (100)	139 (100)

Table : 7.3A Cluster wise 'no treatment' during pregnancy (trimester-wise)

Locality	First trim.	Second trim.	Third trim.	Total
Slum	3 (17.6)	9 (52.9)	5 (29.41)	17 (100)
Non- slum	3 (75)	1 (25)	0	4 (100)
TOTAL	6 (28.5)	10 (47.6)	5 (23.8)	21 (100)

Table : 7.4 Cluster -wise Utilisation of Health facility For Delivery

Cluster group	Private	Public	Home	Others	NA/NR	TOTAL
Slum	14 (27.4)	16 (31.3)	12 (23.5)	8 (15.6)	1 (1.9)	51 (100)
Non-slum	5 (55.5)	2 (22.2)	0	2 (22.2)		9 (100)
Total	19 (31.7)	18 (30)	12 (20)	10 (16.7)	1 (1.7)	60

Table : 7.5 Type Of Health Facility Utiised For Events (exclud. No treatment)

HF Type	Pregnancy	Delivery	Abortion	Contracepti on	Total
Private	16 (57.1)	19 (1.7)	3 (100)	16 (59.2)	54 (45.7)
Public	9 (32.1)	18 (30)	0	10 (37.03)	37 (31.3)
Home	0	12 (20)	0	0	12 (10.2)
Other.incl out mumbai	3 (10.7)	10 (16.7)	0	1 (3.7)	14 (11.9)
NR	0	1 (1.7)	0	0	1 (0.8)
Total	28	60	3	27	118

Table : 7.6 Utilisation Of Health Service Provider

	Pregnancy	Delivery	Abortion	Contracept ion	Total
Provider of care					
Self/ relative/ neighbour	0	4 (6.7)	0	0	4 (3)
Doctor (male / unspecified)	7 (14.2)	4 (6.7)	2 (66.7)	7 (25.9)	20 (14.3)
Doctor (female)	13 (26.5)	8 (13.3)	0	9 (33.3)	30 (21.5)
Nurse	0	10 (16.7)	0	5 (18.5)	15 (10.7)
Dai /CHV / chemist	3 (6.1)	8 (13 3)	0	5 (18.5)	16 (11.5)
> than 1 Provider	3 (6.1)	23 (38.3)	1 (33.3)	1 (3.7)	28 (20.1)
NA/nr	23 (46.9)	3 (5)	0	0	26 (18.7)
Total	49 (100)	60 (100)	3 (100)	27 (100)	139 (100)
Distance from Own / Mother's home					
Less than 10 mts.	9 (36)	9 (20.9)	0	9 (33.3)	27 (27.5)
10 to less than 1/2hr	11 (44)	23 (53.5)	3 (100)	8 (29.6)	47 (47.9)
More than 1/2 hr	5 (20)	11(25)	0	10 (37)	26 (26.5)
Total	25 (100)	43 (100)	3 (100)	27 (100)	98 (100)

Note : Distance excludes Home delivery/ no treatment and no response

Table : 7.7 Reason For Selecting Health Facility (excl. Contraception & include. Pnc services)

Reasons	
Past experience	32 (18 6)
Easy physical access	32 (18 6)
Economic Access	20 (11 6)
Emergency	21 (12 2)
Good services	12 (6.9)
Customary/ any other	10 (5 8)
NA/ nr	45 (26.1)
Total	172 (100)

Table : 7.8 Expenditures Incurred On Components On Maternity Costs (In Actual Ruppees)
(Figures in brackets are number of cases)

Health Care Costs	Costs as % to total				Average Expenditure			Paying Events		
	Pregnancy (49)	Delivery & PNC (60)	Abortions & PNC (3)	Total	Pregnancy (49)	Delivery & PNC (60)	Abortions & PNC (3)	Pregnancy	Delivery & PNC	Abortions & PNC
Doctors Fees	33.96	6.04	0	7.76	72.37	146.76	0	253.28 (14)	733 83 (12)	0
Medicines	25.72	13.35	3.70	13.98	54.82	326.20	36.67	179.07 (15)	748.35 (26)	110.00 (1)
Investigations	11.32	0.96	0	1.62	24.12	23.50	0	197.00 (6)	235.00 (6)	0
Sonography	13.40	0.38	11.12	1.43	28.57	8.75	110.00	466.67 (3)	187.00 (3)	115.00 (2)
Operations	0	0	0	0	0	0	0	0	0	0
Hospitalisation	0	6.31	31.51	6.36	0	153.33	311.67	0	533.33 (6)	467.50 (2)
Travel	7.18	1.79	5.29	2.21	15.35	43.55	52.33	57.85 (13)	90.10 (29)	78.50 (2)
Gift/Bribes	0	2.43	0	2.23	0	59.21	0	0	04.50 (34)	0
Diet	4.78	7.86	0	7.51	10.20	191.08	0	500 (1)	95 (21)	0
Ritual	1.62	10.31	0	9.55	3.47	250.50	0	170 (1)	3.75 (8)	0
Any Other	0.04	0.46	6.74	0.55	0.10	11.38	66.67	250 (2)	7 (8)	100.00 (2)
Combined exp.	1.91	50.06	41.62	46.74	4.08	1215.93	411.67	200 (1)	18 (22)	617.50 (2)
Total	10441	145734	2967	159142	213.08	2428.90	989.00	372.89 (28)	90 (60)	989 (3)

Table : 7.9 Components of Costs for contraception

Components of Costs	Oral Pill Users	IUCD Users	Sterlisation	Total
Device	12.20 (10)			12.20 (10)
Medicines		9.33 (12)	112.50 (4)	35.12 (16)
Travel	1.00 (10)	8.38 (13)	55.00 (4)	12.55 (27)
Diet			27.50 (4)	27.50 (4)
Gift / Bribes			12.50 (4)	2.50 (4)
Combined Exp.		331.81 (13)	612.50 (4)	358.82 (17)

able : 7.10 Diffrentials in Maternity Costs

	Pregnancy	Delivery & PNC	Abortion & PNC	All Events
Locality				
Slum	234.89 (37)	2267.83 (42)	989.00 (3)	1303.25 (82)
Non Slum	146.33 (12)	2804.72 (18)		1741.16 (30)
Age category				
18 – 25	318.10 (30)	1991.08 (36)	195.00 (2)	1200.16 (68)
26 – 35	49.88 (18)	3227.04 (22)	2577.00 (1)	1816.29 (41)
36 – 45	0 (1)	1530.00 (2)		1530 (2)
Number of children				
No children	376.24 (17)		280.00 (1)	370.88 (18)
1 Child	142.94 (16)	3339.91 (23)		2028.33 (39)
2 Children	140.44 (9)	1774.05 (19)	2577.00 (1)	1294.75 (29)
3 Children	7.50 (4)	1276.57 (7)	110.00 (1)	756.33 (12)
More than 4 children	154.67 (3)	2388.45 (11)		1909.78 (14)
Educational Level				
Illiterate	290.19 (21)	1624.50 (28)	110.00 (1)	1033.80 (50)
Primary	0 (1)	817.50 (4)	280.00 (1)	591.66 (6)
Second / Higher sch.	152.76 (17)	3225.83 (18)	2577.00 (1)	1756.63 (36)
Matriculation	57.50 (4)	2736.00 (8)		1843.16 (12)
High second /Grad. / Tech	473.33 (3)	17005.00 (1)		4606.25 (4)
Tailoring/DED	33.33 (3)	20.00 (1)		30.00 (4)
Type of Occupation				
Unskilled/Semi-skilled wrkr.	30.00 (1)	1715.00 (2)		1153.33 (3)
Skill wrkr/Tiny manufacturer	276.67 (3)			276.66 (3)
Nurse/Teacher		4852.50 (2)	1476.00 (2)	3164.25 (4)
Housewife	217.75 (44)	2404.07 (55)	390.00 (1)	1421.95 (100)
Student		0 (1)		(1)
Missing Cases	(1)			(1)
Earning Status				
Non earner		150.00 (1)		150.00 (1)
Main earner	0 (1)			731.75 (4)
SuppleMalestary earner	15.00 (2)	370.00 (1)	2577.00 (1)	8075.00 (1)
Equal Earner	0 (1)	8075.00 (1)		1420.29 (100)
Housewife	222.44 (43)	2401.34 (55)	195.00 (2)	1477.75 (4)
N.R. / Missing cases	423.00 (2)	2532.50 (2)		
Total	(49)	(60)	(3)	(112)

Table : 7.11 Diffrentials in costs on contraception

Cluster	Oral Pill Users	IUCD Users	Sterlisation	Total
Slum	6.75 (8)	277.44 (9)	238.33 (3)	140.60 (20)
Non Slum	39.00 (2)	456.00 (4)	2565.00 (1)	638.14 (7)
Age				
20 to 25	7.00 (5)	180.60 (6)	300.00 (1)	118.25 (12)
26 to 30	23.50 (4)	398.14 (7)	315.00 (2)	270.07 (13)
31 to 36	3.00 (1)		2350.00 (1)	1176.50 (2)
Educational Level				
Illiterate	2.66 (3)	1000 (1)		252.00 (4)
3 to 5	13.50 (2)	10.66 (3)	315.00 (2)	55.57(7)
7 to 8	8.50 (2)	203.00 (5)	1475.00 (2)	443.44 (9)
10 to 12	26.66 (3)	453.75 (4)		270.71 (7)
Occupation Type				
Semi-skilled / skilled	2 (1)		600.00 (1)	301.00 (2)
Secretary / Nurse/Teacher Service	75 (1)	507 (2)		363.00 (3)
Housewife	6.87 (8)	259.72 (11)	893.33 (3)	266.28 (22)

Table : 7.12 Expenditure on Maternity by Utilisation

	Pregnancy	Delivery & PNC	Abortion & PNC	All Events
Type of institution				
Private	541 50 (16)	4669.11 (19)	989.00 (3)	2640.63 (38)
Govt	103 67 (9)	1141.22 (18)		795.37 (27
Outside Mumbai	407.00 (2)	3592.00 (7)		2884.22 (9)
At own home		315.83 (12)		315.83 (12)
Any other	30.00 (1)	3692.50 (2)		2471.66 (3)
Missing cases / NR		80.00 (2)		80.00 (2)
No TreatMalest	0 (21)			
Institution				
Dispensary/ Health Post	340.00 (11)	2529.00 (1)	110.00 (1)	490.69 (13)
Hosp/Nursing home	392.47 (15)	2868.93 (45)	1428.50 (2)	2223.33 (62)
Outside Mumbai	407.00 (2)			407.00 (2)
At Home		714.42 (12)		714.08 (12)
Any other		2765.00 (2)		2765.00 (2)
No Treatment	0 (21)			
Provider				
Male doc. / unspecified gender	298.43 (7)	3233.75 (4)	1363.50 (2)	
Female Doc.	398.62 (13)	3005.13 (8)		
Doc/Nurse/ANM	1585.00 (2)	3141.46 (26)	240.00 (1)	
Dai	0 (3)	866.50 (8)		
Any other *	0 (1)	1438.28 (14)		
NR	0 (2)			
No TreatMalest	0 (21)			
Distance				
Less than 1 k.m	179.11 (9)	4097.44 (9)		
1 k.m to less than 2 .m	607.27 (11)	2508.56 (23)	959.00 (3)	
2 k.m to less than 3 .m	146.50 (6)	2491.11 (9)		
More than 3 k.m	635 (2)	7655.00 (2)		
Home		701.08 (12)		
No treatment	(21)			
Number of Visits				
1 Visit	64.71 (7)	3074.88 (34)	280 (1)	2506.64 (42)
2 Visits	225.25 (4)	757.50 (4)	110 (1)	449.00 (9)
3 Visits	121.75 (4)	3094.50 (4)		1608.12 (8)
4 & more than 4 visits	874.22 (9)	4435.50 (4)	2577 (1)	2013.35 (14)
NR	183 00 (4)	574.14 (14)		487.11 (18)
No treatment taken NA	0 (21)			
Total	(49)	(60)	(3)	112

Note : * Other: Self,releative, Nurse & Ayaha,More than 2 providers

Table : 7.13 Expenditure incurred on Contraception by utilisation

Type of Facility	Oral Pill Users	IUCD Users	Sterlisation	Total
Private	14.66 (9)	755.8 (5)	1475.00 (2)	428 68 (16)
Government	2 00 (1)	11 50 (8)	300 00 (1)	39 40 (10)
N.G O			30 00 (1)	30 00 (1)
Location of Provider				
At home	2 00 (1)			2 00 (1)
Disp/HP/ MCH centre	8 75 (4)	10 28 (7)		6 68 (16)
Hosp/N.H		633 16 (6)	820 00 (4)	707 90 (10)
Local Provider	19.00 (5)			19 00 (5)
Type of provider				
Local Provider	19.00 (5)			19 00 (5)
ANM/Nurse	2.00 (1)	15.00 (4)		12 40 (5)
Doctor male	3.00 (2)	345.00 (3)	450.00 (2)	277 28 (7)
Female doctor	14.50 (2)	462.26 (6)	1190.00 (2)	518 50 (10)

CHAPTER VIII

Conclusions

In this chapter the major findings of the study and the conclusions have been presented. The findings need to be placed in the context of the methodology adopted in the present study, the issues it throws up and the gender differentials that exists in relation to morbidity, utilization and expenditure on health care services.

Methodology

This study highlighted certain very interesting aspects in the methodology of health surveys and in the larger study of women's health. This study indicated the gender-blindness on the household level health surveys. This has been due to the fact that in the present study we used a methodology which was unique. When no importance is attached to the gender of the respondent and interviewer, the levels of morbidity reported for both males and females are almost similar. Due to the modifications that we made in the methodology, we were able to record a significantly higher burden of morbidity among women. The objective of the study was to create an environment which encouraged women to feel unhindered to speak about their health problems even while a deliberate attempt was being made to elicit information about unreported illness through the probe list. This impressed on us the need to be sensitive to women's perceptions about their health problems. Purely medical or even sociological categories of illness would prove inadequate to record the complexity of illness perceived by women. Although this fact has been stressed in almost all qualitative micro- studies on women's health, an attempt was made to integrate these insights into a quantitative study.

The present survey threw a lot of issues related to the methodology with regard to the conduct of the study and analysis. This survey in Mumbai city was in many ways a pre-testing or pilot study preceding the main and larger survey on women's health in Nashik district. It helped us at various stages to critically evaluate the methodology so that many of the weaknesses or shortcomings were overcome for the main survey in Nashik district.

Morbidity

Out of a total of 780 episodes reported the monthly prevalence rate of illness worked out to 363 per thousand, with the gender difference being very vast. The monthly prevalence rate for males was 169 per thousand as compared to 297 for females. When we add the episodes reported after probing the rate for females goes up to three and half times, 571 per thousand. No previous household study has reported such a high morbidity. The high morbidity reported by women in our sample was complemented by high prevalence rate of specific types of illness. Reproductive illness accounted for 28.2% of all episodes among females, the majority of them related to menstruation and child bearing. A very high percentage of women reported morbidity due to aches, pains, injuries and weakness. Taken together with reproductive problems they form 51.69% of all illnesses reported among women. In terms of gender difference there was marked difference in the type of illness reported in every category of illness. Women have reported remarkably higher levels of almost all types of illnesses especially after probing.

Further the findings point to a strong relationship between women's work lives and their health. No study of work and health among women can afford to avoid an exploration of the household as a workplace. For 90 % of the women (in this case), the household is the site where they engage in the task of fulfilling the household's economic as well as other needs That all married women, (and those with children more so) reported significantly higher morbidity than other women is an indicator of the additional burden of morbidity that reproductive labour imposes. That this task becomes more demanding on their health within a degraded environment is very evident. This study points towards a need for more systematic study into women's health problems in relation to their work. Just as we observe the changes affecting other areas of work, in terms of technological changes, changes in labour organisation, etc., it would be incorrect to understand 'housework' as an unchanging routine of tasks. We must understand how the nature of reproductive labour is transformed by changes in the larger world which surrounds the household where it is undertaken. This would give valuable insights into the study of the health problems of women, who labour both in and outside the home. The findings also throw more light on the pressures of urban living and in a marginalised community such as a slum which are reflected sharply in the reporting of morbidity. This also prompts us to explore further into the health consequences of poverty for those who live on the social margins of the city. We find a population who is reporting an increasingly lower sense of 'well being'.

Utilization of health services

In the study we find that there was a very high non utilization in our sample, 32.5% of the illness episodes were not treated. Non utilization was also found in relation to pregnant women and those who had delivered. 43% of the pregnant women did not utilize any facilities. A quarter who were in their first trimester, 47% who were in their second trimester and 23% in their third trimester. 20% of the deliveries were conducted at home. These findings clearly show that Mumbai inspite of having some of the best health facilities in the country, people residing within the city were not able to access them. It is a shame that in a premier city especially women do not have access to the basic health facilities. If this is the case in Mumbai the situation in rural areas could be well imagined.

The study found a very high utilization of the private health services and the limited role played by the public sector in the city of Mumbai for provision of health care. The majority of the people were going to the private health sector. The role of the pubic health sector was very minimal. Nearly 85% of the illness episodes approached the private facility, with public facility accounting for only 10%. Of those pregnant women who utilized health facilities, 57% utilized private facility and only 32% utilized public facilities. With regard to deliveries the public sector accounted for only 30% of the deliveries as compared to the private sector which accounted for 31.7%. All the 3 abortions reported utilized the private facilities. It is important to note that even for contraceptions the use of private health facilities was much higher than public facilities. The public health facility is being utilized by only 38% of the total contraception users. The utilization of the private facilities was mainly to the clinic / dispensary located nearby. The people showed a marked difference in the use of public facilities as they mostly approached a hospital rather than dispensary / clinic / health posts when they utilized public facilities. Public facilities were utilized by mainly the people from the slums in our study. As mentioned earlier Mumbai has a vast network of public facilities provided mainly by the municipal corporation complemented by the state government. Though this facilities exists there is a disparity in terms of their utilization. At one end the

tertiary care hospitals are overloaded, with the number of beds being not sufficient, high out patient care utilization and at the other end of the scale maternity homes, dispensaries and health posts not being utilized. People prefer to go directly to hospitals than to the first level unit as most of the time they do not have medicines, doctor not available, timing not proper among a host of other reasons. The solutions seems to be in strengthening the first referral care backed by a good referral system.

Access to health facilities was one of the major factors in terms of utilization with regard to aspects of who provided care in the facility and distance of the facility. There was clear preference to approach the doctor by both male and female illness episodes, which was around 80%. Self medication was sought by only 4% of the episodes, which was mainly purchasing the drugs directly from the chemists shops / general store. With regard the provider for maternity event we found that the female doctor was preferred by 21.5% of the women followed by 14.3% by the male doctor, nurse by 11% and the local chemist/ CHV/ Dai by 11.5%. Women prefer to go to a female doctor especially when it relates to their reproductive and sexual health. This is again reinforced by our finding which shows that 39% of the reproductive illness were not treated, one of the factors could be due to the non availability of female doctors coupled with other factors related to access of health care services. Nearly two thirds of the illness episodes approached health facilities which was less than 10 minutes distance from home, 78% of them being private health facilities. In case of events about three fourths of the women utilized health facility which was at a distance of not more than 1/2 hour. It needs to be noted that though the physical accessibility does play a important role, the timing of the health facility is also important as it is generally found that the public facilities are inconvenient to majority of the people as compared to private facilities.

The strong gender bias is very much evident right across the findings of the whole study. Women in our study have got a raw deal both in terms of utilization and the expenditure incurred on their illness and non illness events. One finds that irrespective of the age, education, occupation, earning status, location of the households there was a wide difference among men and women in terms of utilization. Out of the total of 271 not treated illness episodes male episodes accounted for only 17 and female episodes accounted for 254 episodes. On the whole about 67% of the illness episodes were treated at one or the other health facilities. Majority of the male episodes were treated while for women it was much less. Home remedies was utilized by more number of women than males. Women's use of chemists/ pharmacists / home was close to double that of male utilization, indicating their accessibility in terms of time, resources, and in keeping with their perception of what can be treated outside of the formal structures and as a stop gap arrangement.

For women in all age groups formal health facility utilization (public and private) is lower than men. Women in the age group of 0-11 years have a high number of treated illness but as the age increases the utilization comes down. During adolescent age males had 89% of their illness treated whereas the females had only 60% of their illnesses treated. Women in the 26-35 years age group, have the lowest percentage of treated episodes. Older women i.e. above 45 years do not receive as much health care attention as the men in the same age group. Men are privileged in terms of utilization irrespective of the age they are in as compared to females who are not able to utilize health facilities, as they grow older.

In terms of location of the households we find that males in slums have a higher percentage of treated episodes than females. The gender bias continues with men belonging to any of the occupation category having higher percentage of treated episodes than their counterparts among the women. Housewives formed a large section of our respondents. We find that 46% of them who had fallen ill did not take any treatment. Those women who had independent income did not fare very differently from the housewives with regard to utilization of health services. Our study does not show any direct impact of education on health seeking behavior. The important thing is that irrespective of the educational status, all the males treated about 86- 94% of their episodes. On the other hand no matter how high the educational level of the women not more than 65% of their illness episodes are treated. This clearly brings out the fact that utilization of health facilities for females is not determined by her earning status, occupation and education. What becomes evident is that low status of women in the household set up and the society leads to a very different pattern of treatment and non-treatment for men and women.

Expenditure on Illness

The study threw up various major issues with regard to the expenditure patterns especially in connection with an urban setting and the gender bias. The total expenditure on health care (includes maternity and contraception) worked out to Rs. 240790. Taking figures for a monthly basis the total expenditure works out to Rs. 88315. (note : the expenditure of maternity and contraception have been taken on a per month basis). In terms of proportion of expenditure we find that 84.30% went for treating illness, 15% went for maternity, leaving less than 1% for contraception. On an average the per capita expenditure worked out to Rs. 41.09 for the entire population of 2149 persons and for a household having a family size of 4 it worked out to Rs. 164.45 per month. Taking the figures for a per annum basis we find that the expenditure per capita works out to Rs. 493.08 and Rs. 1973.51 per household. The expenditure incurred is much higher that what is spent by the government which is just Rs. 250 per person in Mumbai city and very much less than the national per capital expenditure of Rs. 90.

Analyzing expenditure only on illness we find that out of a total expenditure incurred of Rs. 74455 by the sample population, the per capita expenditure works out to Rs. 34.64 per month, which works out to Rs. 415.68 per annum and for the 780 episodes reported cost working out to Rs. 95.45. Since not all episodes had utilized health facilities and those that had utilized many did not pay the expenditure per paying episode worked out to Rs. 166.93. The major component of expenditure was incurred on medicines. 90% of the expenditure incurred was on doctors fees and medicines. Majority of the expenditure nearly 85.41% was spent on private health facilities. In terms of per episode costs we find that the expenditure on public facilities much higher than that was incurred on the private facilities. The main reason being that we find that number of female episodes going to private much higher and the males spending more in the public facilities as compared to women. Three fourths of the expenditure was incurred by illness episodes in the non slum area, though the morbidity was much higher in the slum area. The people in slum who form the bulk of the population and more illness occur are not able to spend due to their low income and lower socio economic status.

The gender bias is very much evident in term of expenditure on illness. Expenditure incurred on female illness episodes was much lower than what was spent on males. In terms of per episode cost the expenditure incurred on females was just Rs. 78.59 as compared to expenditure on males which was Rs. 148.56. With regard to those that had utilized health facility we find the same pattern emerging. The expenditure incurred on the 145 male illness episodes the average per episode cost was Rs. 192.61 as compared to 301 female illness episodes of Rs. 154.57. In both the slum and non slum areas households were spending less on illness episodes affecting women than what was spent on males. Further with regard to the expenditure incurred by type of treatment we find that reproductive illness which accounted for 21.41% of the total episodes the expenditure incurred was only 19.31% of the total expenditure incurred. The costs per episode of those who had utilized facilities for reproductive illness worked out to a high of Rs. 221.26 per episode. The lowest expenditure incurred was on weakness Rs. 35 15 which affected 95% of the women who reported ill Examining the expenditure incurred by age we find that as the age increases from 12 to 45 years, the difference in expenditure become sharper between males and females with less expenditure incurred on female illness episodes. Only during the ages of 12 to 17 the expenditure incurred on females is higher Rs. 260.79 than males Rs. 41.05 and slightly higher in the age group between 18 - 25 years. The expenditure incurred on currently married women was less than half Rs. 90.26 per episode as that of the males in the same category. Across all categories (except the unskilled and semi skilled workers where the difference was only marginal) the expenditure on male illness episodes was on the higher side than the females with difference being vast among the lower level professionals. In terms of gender difference we find that where the women is an equal earner the per episode cost Rs. 41.83 is higher than the males Rs. 35.00. This clearly reveals that in terms of expenditure males were spending more than females.

Analysis of expenditure incurred on non illness events reveals that 91% of the expenditure incurred was incurred on delivery, pregnancy accounting for 6.56% of the total costs incurred on maternity events. The mean expenditure on all maternity events works out to Rs 1433.71 per event an the average expenditure on pregnancy Rs 213.08, delivery Rs 2428.90 and abortion Rs 989.00. Of those 28 pregnant women who utilized health facilities the average paying event cost was Rs. 372.89. With regard to expenditure incurred on contraceptive we find that out of the total expenditure incurred of Rs. 7283, 50% of the expenditure incurred was on those who utilized IUD's and 45% was spent on the 4 sterilization's. The average expenditure incurred on oral pills per user was Rs. 13.20, for IUCD user Rs 297.77 and for sterilization Rs 820 and for all the users it was Rs. 769.74.

The overall issues that the present study bring out that the methodology employed for studies of this nature needs to be more sensitive in relation to women's health with an emphasis on eliciting information from women with regard to illness that are not perceived as illnesses as such and illnesses which relate to reproductive and sexual aspects. This study throws up the issue of non utilization of health services especially women who suffer from various illness and for deliveries even in a premier city such as Mumbai which has better public health facilities as compared to other parts of the country. This raises the question that though the services may be available the access to them are determined by factors operating within the household and outside. The factors related to issues within the household need to be dealt at a societal level. The forces that operate at the more broader level need to be examined in a more gender sensitive manner so that more women can avail of the services.

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